FRONTISPIECE

Facsimile of the frontispiece from Palestrina's

First Book of Masses which was published

in 1554 A. D. and dedicated to

Pope Julius III
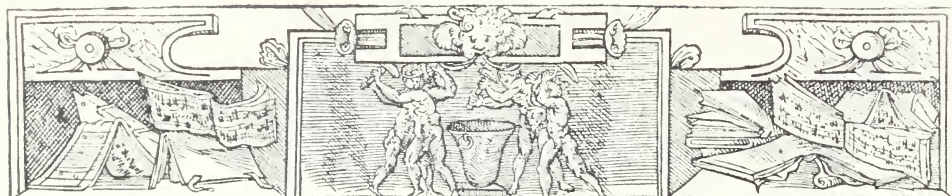
IOANNIS PETRI
Loisij Praenestini in basilica
S. Petri de vrbe cappellae
Magistri
MISSARVM LIBER PRIMVS

IN VIA VIRTVTI NVLLA EST VIA

THE UNIVERSITY OF ALBERTA

THE
CANTUS FIRMUS MASSES
OF
PALESTRINA

by

WALTER CARL MEYER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF MUSIC IN

APPLIED MUSIC (VIOLONCELLO)

AND

MUSIC HISTORY AND LITERATURE

DEPARTMENT OF MUSIC

EDMONTON, ALBERTA

SPRING, 1976

ABSTRACT

Palestrina was highly esteemed by his contemporaries
and his music has been revered by scholars and performers
throughout the four centuries since his time. Despite his
stature as a composer there are many areas related to his
life and work where information is incomplete and where
statements are in conflict. Authorities have arrived at
different conclusions regarding the predominating structural
techniques used within the masses, resulting in disagreement
concerning the classification of his cantus firmus masses.

The purpose of this study has been to establish
criteria for the classification of Palestrina's cantus firmus
masses and to investigate the manner in which he used cantus
firmus technique in these masses.

Chapter I deals briefly with Palestrina's life, his
compositions, and the types of masses he wrote. In
chapter II the characteristics of Palestrina's cantus firmus
masses are given, followed by a brief history of the use and
development of cantus firmus as a technique of composition.

There is a discussion of L'homme armé as a cantus firmus

source, and an explanation of solmization procedures in the

derivation of cantus firmus melodies.   In chapter III the

masses which have the visual appearance of cantus firmus,

along with others that have been erroneously classified are

discussed, leading to the establishment of the list of

Palestrina's cantus firmus masses.   Chapter V contains

summaries of various aspects of Palestrina's use of cantus

firmus.

TABLE OF CONTENTS

INTRODUCTION

In Vienna in the year 1725, far removed both in dis-
tance and in time from the Rome of Palestrina, Johann Joseph
Fux (1660-1741), composer, theorist, and director of music
at the Imperial Court of Austria, published Gradus ad
Parnassum, his most enduring work. This treatise on counter-
point "marked a turning point in the evolution of music
theory."[1] Either copies of the Latin original, or transla-
tions of the work have been used by myriads of music students,
and by many of the world's great composers from Haydn and
Mozart to the present time. Fux wrote the work in the form
of a dialogue between the "venerable Master Aloysius" and the
pupil, "Josephus." Using explanations, examples, and exer-
cises, Aloysius teaches Josephus the art of counterpoint ac-
cording to sixteenth-century tradition. From this dialogue
originated the five species of counterpoint over the long note
cantus firmus familiar to all students of music. In the
author's foreword he explains,

---

[1]Alfred Mann, trans. and ed., The Study of Counter-
point from Johann Joseph Fux's Gradus ad Parnassum (New York:
W. W. Norton and Co. Inc., 1965), p. x.

1

> By Aloysius, the master, I refer to Palestrina, the
> celebrated light of music, from Praeneste (or, as
> others say, Praeeste), to whom I owe everything that
> I know of this art, and whose memory I shall never
> cease to cherish with a feeling of deepest reverence.[1]

Fux here illustrates the great veneration in which he held

the music of Palestrina and implies that the methods in his

book are derived from the contrapuntal practices which

Palestrina followed.

More recent theorists, however, have been highly crit-

ical of Fux's method. Gustave Soderlund says,

> The supposition by Fux that his system was based
> upon the contrapuntal practices of Palestrina cannot
> be maintained: the rigid adherence to a cantus
> firmus in even notes (already obsolete in sixteenth
> century), and the exclusion, both of the ecclesia-
> stical modes and of the rhythmical diversity of
> voice leading in the vocal polyphony, gives a highly
> artificial and stylistically misleading picture of
> the contrapuntal practice of the sixteenth century.[2]

Reginald Owen Morris, another pedagogue of the twen-

tieth century, remonstrates almost with venom against these

same five species and the rules that govern them. He states,

> As for the Five Species, it needs a more skilful
> advocate than the present writer to find any plausible
> defence for them. They do untold harm . . .[3]

The opinions expressed by these three authorities, as

---

[1]Mann, Fux's Gradus, p. 18.

[2]Direct Approach to Counterpoint in Sixteenth-Century
Style (New York: Appleton-Century-Crofts, Inc., 1947), p. vii.

[3]Contrapuntal Technique in the Sixteenth Century
(Oxford: The Clarendon Press, 1964), p. 6.

well as others, show that despite the lofty position in which
Palestrina is regarded as a composer, there have been, over
the years, differences of opinion about the methods he used
in composition.

Palestrina was held in the highest esteem by his con-
temporaries and has been revered by scholars and performers
throughout the four centuries since his time. He has been
called the most important composer of the Renaissance. On
his casket were placed the words Musicae Princeps (Prince of
Music). The music of Palestrina, especially his masses, is
always referred to in superlative terms, and the quantity of
his music is astonishing in its magnitude. Yet, there are a
number of areas related to the life and work of Palestrina
where information is incomplete and where statements are in
conflict.

The purpose of this study is to formulate criteria
for the classification of Palestrina's cantus firmus masses
and to investigate in some detail the manner in which
Palestrina used the C.F. technique in his C.F. masses. It
was necessary to (1) define the characteristics of
Palestrina's C.F. masses, (2) establish which are the C.F.
masses and (3) make a stylistic examination of the use of
C.F. in these masses.

Chapter I deals briefly with the life of Palestrina,

his compositions, and the types of masses he wrote. In
chapter II, cantus firmus is discussed as a technique of com-
position including illustrations of various C.F. procedures.
Chapter III deals with the application of the criteria that
have been established in order to determine which masses by
Palestrina are C.F. masses. Chapter IV contains a discussion
of the use of C.F. in these masses. Chapter V is a summary
and conclusion.

The Rome edition[1] of Palestrina's complete works has
been used as the principal musical reference for this study.
Modern notation including barring is used and page and bar
numbers refer to that edition.

Terminology

movement---a major textual division of a mass referring to
     to _Kyrie_, _Gloria_, _Credo_, _Sanctus_, _Agnus Dei_.

section--a portion or division of a movement such as _Kyrie I_,
     Qui tollis, _Agnus Dei II_.

part--a portion or fragment of a theme used as a C.F.

---

[1]_Le Opere Complete di Giovanni Pierluigi da Palestrina_
(Rome: Instituto Italiano per La Storia Della Musica, Edizione
Scalera, 1939-72).

CHAPTER I

THE LIFE AND WORKS OF PALESTRINA

Biography

Information about the life of Palestrina has been ob-
tained from official church documents, choir records, re-
ceipts from business dealings, correspondence, and dates of
his musical publications. More is known of his later life
than his earlier life because of his increasing stature in
church musical activities.

In the archives of the Chapter, "Joannes de
Pelestrina" was listed in 1537 as one of the six choir boys
at Santa Maria Maggiore in Rome. A contract dated October
23, 1544 drawn up with the cathedral of Saint Agapito in the
town of Palestrina notes his appointment for life as "choir-
master on all occasions, organist on festivals, and instructor
of canons and boys." In November 1551 the records of the
Julian choir of Saint Peter's[1] indicates "Magister Joannes"

---

[1]The Julian choir was instituted in the late fifteenth
century to provide training for Italian singers and was charg-
ed with singing the daily services in the old Saint Peter's
Cathedral.

with three boys in his charge. Pope Julius III who ascended the throne in 1550, and who had been Bishop of Palestrina, caused the composer's life appointment at Palestrina to be annulled and called him to the Basilica at the Vatican. In January 1555 he was appointed a singer in the Pontifical Choir.[1] His appointment "by our Lord the Pope," without the usual examination, and without the assent of the singers of the choir, led to his dismissal by Pope Paul IV six months later.[2] The reasons as listed in the choir records were first, that he was married, a condition contrary to the rules of the choir, and secondly, the unsuitability of his voice.

The next two appointments were each for five years, first as choirmaster at San Giovanni Laterano until 1560, then from 1561 to 1566 as the director at the church, Santa Maria Maggiore, where he had been a choir boy. In 1566 Palestrina was engaged as music master and teacher in the newly founded Roman Seminary for the education of students bound for the priesthood. The next position was the only one during his lifetime in which he was involved with other than

---

[1]Also referred to as both the Papal choir and the Sistine choir. It was this choir that sang whenever and wherever the Pope presided at a service. The membership until the mid-sixteenth century consisted primarily of foreign musicians.

[2]Pope Julius III died in March 1555, two months after Palestrina's appointment. Pope Marcellus II died three weeks later.

church music. At the request of the wealthy Cardinal
Ippolito d'Este, son of Lucrezia Borgia, Palestrina took
over the direction of the musical activities at the Cardinal's
villa at Tivoli. This task included the performance of in-
strumental as well as choral music. He had directed the
music for the Cardinal during the summer for two previous
years but accepted the full-time appointment in 1567.

The composer Giovanni Animuccia, who had succeeded
Palestrina in the Julian choir, died in 1571 and Palestrina
now succeeded him. His first appointment at Saint Peter's
had been as "Master of the boys"; this time he was "Master
of the Julian Chapel." Palestrina remained in this position
from 1571 to his death in 1594.

Many activities of Palestrina's life remain matters
of speculation. It is believed that he was born in the
small town of Palestrina (Praeneste of ancient Roman times),
about thirty-seven kilometers southeast of Rome, but on the
other hand he may have been born in Rome because it is known
that members of his family lived there at the time of his
birth. The sack of Rome in 1527 resulted in the destruction
of documents and church records including those of the town
of Palestrina, so no birth records exist for the composer,
but evidence indicates three possible dates: 1514, 1529, or
1525, the latter being the date that is now generally

accepted.[1] Whether Palestrina's family name was Pierluigi

or Sante is unclear. Moreover Palestrina's signature on re-

ceipts and letters is not consistent. He signed himself

variously as Giovanni, Giovanni da Palestrina, Giovanni

Petraloysio Prenestino, Gio. petraloysio, il Palestrina,

Palestina, Palestrino, Penestrina or even by the diminutive

Gianetto. The location of his remains is unknown even

though his death and burial on February 2, 1594 were reliab-

ly documented. The old Basilica in which he was entombed

was replaced by the present Saint Peter's and all the cask-

ets had been moved to different locations during the transi-

tional period. Years later, when the new tomb of Palestrina

was inspected, it was found that the casket inside was not

his for it lacked the inscription Musicae Princeps.

How well did Palestrina sing? What did he do bet-

ween his two appointments in 1555 and again those in 1560,

and why did he hastily leave San Giovanni's in 1560? Was he

an effective teacher and choirmaster? Palestrina was engag-

ed as organist in Saint Agapito, and at the d'Este villa his

responsibilities included instrumental music. How well did

he play the organ; did he also play other instruments? What

---

[1]Nevertheless, the town of Palestrina accepted 1514
as the correct date because a subscription celebrating the
quatro-centenary of his birth was started there in 1914 lead-
ing to the unveiling of a statue in his honour in the town
square in 1921.
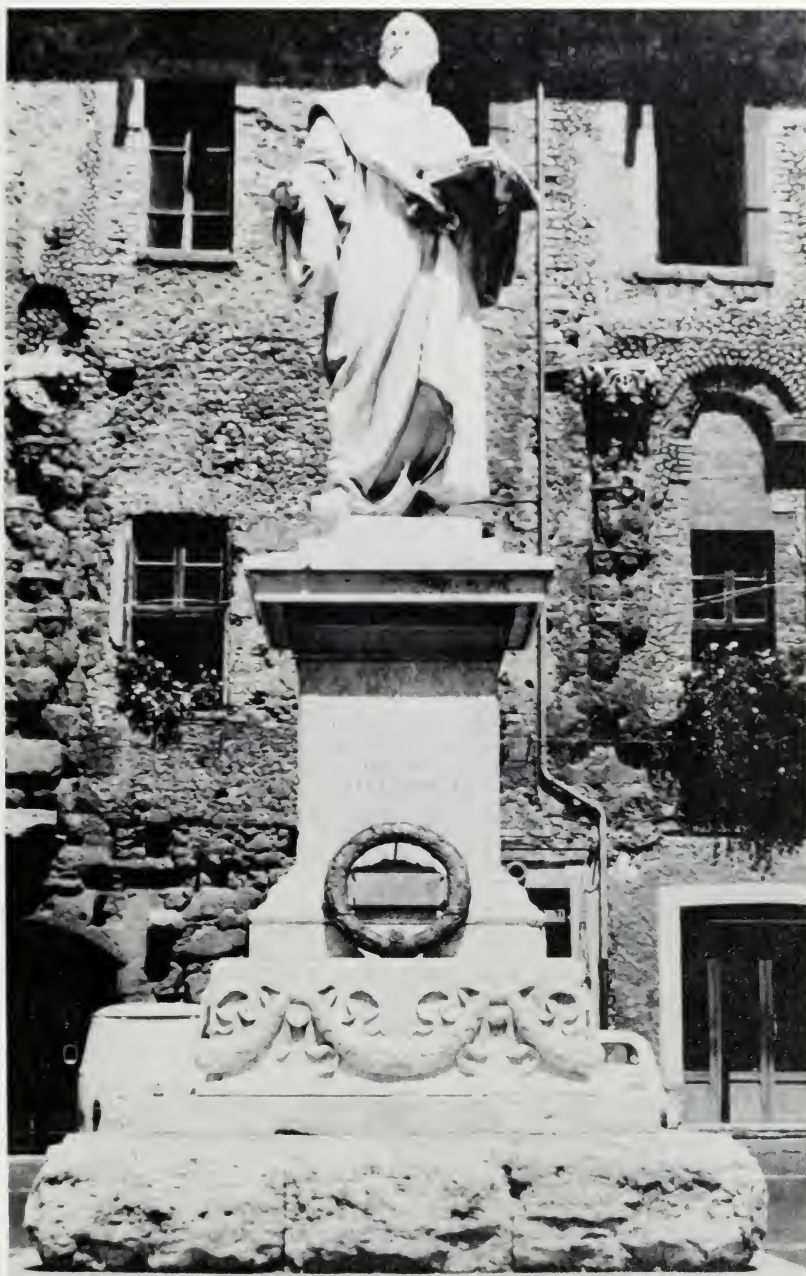
Statue of Palestrina. It was erected in 1921 and stands in the Piazza Regina Margherita which adjoins the cathedral where the composer was employed in the town of Palestrina.
(Photo--1972)

Birthplace of Palestrina. The marble plaque over the arched
doorway marks the entrance. The house is in a state of dis-
repair.   (Photo--1972)

music did he play; did he only improvise and not write down
what he played? Did he only play other composer's works, or
did he compose instrumental works which have since been lost?
The records are silent.

Palestrina could not help but be aware of the works
of Michelangelo. The great sculptor, painter, poet and
architect was already seventy-six years old when Palestrina
arrived at the Vatican. Most of his work had been completed
except that relating to the building of Saint Peter's. He
had been appointed chief architect in 1546, and was engaged
in this task throughout the time of Palestrina's first ap-
pointment at the Vatican. It is unlikely that the young
composer would not have known the artist both by reputation
and by sight, but was the artist aware of the composer? Did
he hear any of his music? Were they personally acquainted
during this period even though there was fifty years differ-
ence in their ages; was there communion between the two
great minds? Was he personally close to any of the intel-
lectuals of the day? Again, the records are silent.

Palestrina's music represents the pinnacle of a long
period of development of unaccompanied church choral music.
He was one of the first of the Italian composers to achieve
emminence in church music in Rome and through his influence
other Italian musicians gained recognition. This influence

continued through L'Accademia di Santa Caecilia which he helped to found. Palestrina's musical heritage was based primarily upon Franco-Flemish influences. His music is probably more Flemish in nature than was that of his contemporary, the Flemish composer Roland de Lassus (1532-1594). In the period 1470 to 1550 there were at least 107 Flemish or Franco-Flemish composers in Rome. The Pontifical choir having only sixteen singers, mostly foreign, absorbed only a small number of these musicians at a time so the preponderance of Flemish musicians in other appointments in Rome can be appreciated. Despite this Flemish influence however, his music does comprise an amalgam of three components, Italian lyricism, Flemish technique, and Spanish devoutness.

Both the Catholic church and religious philosophy in general were strong influences in the latter half of the sixteenth century. The Reformation had commenced decades earlier and the Counter Reformation in Spain and Rome was in progress. Almost all of Palestrina's musical life was spent in service to the church, and the influences of the time which helped determine the actions and direction of the church affected his life. Except for a few madrigals, the immense quantity of music which he wrote was sacred. In the dedications of two of his books of motets Palestrina explained some of his thoughts about the importance of music for

worship. In the first book he wrote, "if men take great pains to compose beautiful music for profane songs, they should devote at least as much thought to sacred song."[1] In the fourth book he states,

> there exists a vast mass of love songs of the poets, written in a fashion entirely <u>foreign to the pro-</u> <u>fession and name of Christian</u>. They are the songs of men ruled by passion, and a great number of musicians, <u>corrupters of youth</u>, make them the con- cern of their art and their industry; in proportion as they flourish through praise of their skill, so do <u>they offend good and serious-minded men</u> by the depraved taste of their work. I blush and grieve to think that once I was of their number.[2]
> <div align="right">(italics mine)</div>

In the last sentence of the above quotation he refers to the few secular madrigals he had written earlier. Palestrina was a product of the church and of the Counter Reformation, both in his music and in how he lived--all for the glory of God.

Musicians of the sixteenth century depended entirely upon patronage for their livelihood. The church was such a strong and important influence in this period that many of the musicians of the time spent their lives, as Palestrina did, serving it. This is one of the reasons for the large body of religious compositions in this period.

---

[1]Sam Morgenstern, ed., <u>Composers on Music</u> (London: Faber and Faber, 1956), p. 3.

[2]<u>Ibid.</u>, p. 4.

<u>Compositions</u>

Of Palestrina's complete works, sixteen volumes con-
tain masses, seven volumes contain motets, four contain ma-
drigals, and the few remaining volumes contain lamentations,
magnificats, offertories, litanies and hymns. There are 159
madrigals of which about 91 are spiritual and about 68 are
secular. Motets comprise the second largest group of
Palestrina's works. Sixty-six were written for four voices,
135 for five voices, 37 for six voices, 3 for seven voices,
13 for eight voices and 5 for twelve voices, making a total
of 259 motets in the Rome edition of the complete works.

Masses

Palestrina's masses comprise about half of the
amount of music he wrote. The Rome edition contains 103
masses of which 40 are for four voices, 37 for five voices,
21 for six voices, 4 for eight voices and 1 for eighteen
voices. The eight-voice and the eighteen-voice masses dif-
fer in structure from the rest of the masses. The eight-
voice masses are written for two choirs of four voices each,
and the eighteen-voice work is for three choirs of six
voices each. In each work the choirs are often used anti-
phonally. In the case of the eighteen-voice mass, when the
three choirs are not singing antiphonally, the six voices
are doubled. These five multi-choir masses use the same num-

ber of voices in each section of the work, whereas in all the other masses there are sections with fewer voices, and also sections with more voices, than those used at the start of the mass. As well as the 103 masses mentioned there is one further mass in the Rome edition. This work was written by a number of different composers, each having contributed either a section or a few sections of the mass. The first part of the Gloria was the section composed by Palestrina. Most of the work is written for twelve voices (three choirs of four voices each) however three sections are for four voices and one section is for eight voices (two choirs of four voices each). Of Palestrina's 103 masses, about one-half are parody masses, about a third are paraphrase, five are canonic, six are freely composed and a few are cantus firmus.

A paraphrase mass is one that uses thematic material borrowed from a pre-existent melody (or melodies) which is adapted or manipulated, and used generally in all voices. A parody mass derives its material from an existing composition such as a motet, a multi-voiced chanson or another mass. Either the whole composition, or major sections of it, are adapted or reworked so that a new composition is formed, one which resembles the model. Canonic masses are those in which the use of canon, either single, double or multiple, is

the principal technique used in the composition. A compos-
er's technical skill is particularly displayed in this type
of mass. Freely composed masses are those in which all the-
matic material is original to the composition.

None of Palestrina's masses is commonly referred to
as a "plainsong mass" although some make use of this techni-
que, along with both paraphrase and cantus firmus techniques.
They are classified as paraphrase masses. About seventy-nine
of Palestrina's masses use Gregorian chant as a source for
the thematic material. Many of these are paraphrase, many
are parody based on an original work which used plainsong,
and some are cantus firmus.

———————————————

CHAPTER II

CANTUS FIRMUS TECHNIQUE

Definition

  Cantus firmus has been variously described as "a
melody adopted by a composer for contrapuntal treatment,"[1]
or as "an existing melody that becomes the basis of a poly-
phonic composition through the addition of contrapuntal
voices."[2] The latter definition assumes that the C.F. is an
entity in itself to which additional voices have been added.
A further definition supports this concept: "a pre-existing
melody used, generally in long notes, as the foundation of a
polyphonic composition."[3] Edgar Sparks suggests that a pre-
existing melody can be used either (a) as it exists, unalter-
ed except for having long or extended note values, or (b)
with the melody or part of the melody altered both melodi-

---

  [1]H. C. Coles, "Cantus Firmus," Grove's Dictionary of
Music and Musicians, 5th ed., II, 49.

  [2]"Cantus Firmus," Harvard Dictionary of Music, 2nd
ed. 1969, p. 130.

  [3]"Canto Fermo," Collins Music Encyclopedia, 1959,
p. 110.

cally and rhythmically.[1] He observes,

> Composers normally did not copy out the borrowed
> melody literally, but manipulated it in a great
> variety of ways. In many cases the preliminary
> manipulation was as important a part of the crea-
> tive process as the writing of the counterpoints.[2]

Such a definition of cantus firmus which includes manipula-

tion of the pre-existing melody necessarily includes within

the classification of cantus firmus masses both those with

long or extended note values as well as those that are more

correctly defined paraphrase masses. Thus two categories of

masses are combined into a single large category. This is

the classification supported by Sparks, but he acknowledges,

> Composers sometimes proceeded as students do nowadays
> and laid out the part in long notes of equal value.
> They did this not often, but often enough that I have
> had to consider it as a category of treatment in its
> own right.[3] (italics mine)

For this category Sparks chose the term "strict" cantus fir-

mus. It is this strict category of C.F. treatment that has

provided the basis for the classification of cantus firmus

masses in this study.

The following characteristics distinguish Palestrina's

cantus firmus masses from his others:

---

[1]"Cantus Firmus in Mass and Motet, 1420-1520
(Berkeley: University of California Press, 1963).

[2]Ibid, p. 1.

[3]Ibid, p. 2.

1. The same theme appears in each movement of the mass and is therefore a unifying factor.

2. There is a characteristic visual appearance to the printed page in many places where cantus firmus technique is used. The C.F. voice often uses only elongated note values making it stand out visually--and perhaps aurally--from the shorter notes of the other voices.

3. The theme used as the C.F. is seldom altered either by changing or by adding notes, although it is often altered rhythmically.

4. With few exceptions the complete theme of the C.F. is presented before it is repeated; the melody is seldom fragmented in the C.F. voice.

5. When the C.F. is presented in a section it remains in the same voice throughout the section, and that voice sings only the C.F. theme.

6. The C.F. is placed in various voices, not only in the tenor.

7. The C.F. voice itself is generally independent of the polyphonic texture although thematic material from the C.F. is often used in the other voices.

History

Cantus firmus technique originated with tenth-century organum in which a parallel voice was added to the cantus

firmus plainchant. Organum progressed through stages of similar, oblique and contrary motion eventually achieving complete melodic independence of voices. In eleventh-century St. Martial organum flowing melismas were sung over sustained notes of the chant. Later, by a process of rhythmic organization and the addition of words, the thirteenth-century motet appeared with motetus and triplum voices, each supported by, although independent of the tenor C.F.

Unified practices in settings of the complete ordinary in the early fourteenth century are part of the history of C.F. masses. The Messe de Notre Dame of Guillaume de Machaut (ca.1300-1377), although not a C.F. mass, is unified by a short motive common to each movement. The idea of unification was an important element in the development of the C.F. mass. Cantus firmus as a unifying factor in composition was initiated later.

Most early settings of the ordinary which use C.F. are more accurately classified as "plainsong masses" rather than as C.F. masses even though C.F. may be used throughout the work. The composers of plainsong masses used a kyrie chant as the source of the C.F. in the Kyrie, a gloria chant in the Gloria and a benedictus chant in the Benedictus, etc,; thus a common motive was absent and unless some other technique of unification was employed movements of the mass might

have been substituted during the service with movements from other masses.

The idea of a cyclical mass using the same theme throughout each movement and thereby producing a unified whole seems to have originated with the English in the early fifteenth century. John Dunstable (ca.1370-1453) was perhaps the first to use C.F. as a unifying device. Two mass movements are extant, a Gloria and a Credo, each of which contains the same melody stated twice in the tenor. Missa super Alma redemptoris mater a3 by Leonel Power (d. 1445) is one of the earliest examples of a mass containing a C.F. in each movement. The Kyrie, as was the practice in settings of English masses, is not present, but the C.F. is found in the tenor, the lowest voice, of the other four movements.

Although the C.F. idea seems to have been of English origin it was quickly accepted and eventually developed extensively by the Franco-Flemish composers Johannes Ockeghem (ca.1420-ca.1495), Jacob Obrecht (1450-1505) and Josquin Des Prez (ca.1440-1521). Virtually every composer of masses during this period used the C.F. technique. Guillaume Dufay (ca.1400-1474) was possibly the first of the Franco-Flemish composers to use the technique and was probably responsible for establishing the second lowest voice in a four-voice mass as the C.F. voice. Through the next two centuries the ordi-

nary of the mass as an integrated work resulted in some of the most important music of the period. Cantus firmus, as a cyclical procedure having a unifying power gained from the repetition of a melody from movement to movement, is undoubtedly one of the great landmarks of musical development.

In developing the C.F. mass technique Renaissance composers seemed to have had difficulty in dissociating a plainsong melody from its original text. That which appeared logical in a polyphonic plainsong mass did not seem appropriate in a C.F. mass; the renaissance mind seemed loath to employ a kyrie theme for anything other than a Kyrie movement or an agnus Dei theme for anything but an Agnus Dei. On the other hand, they did not hesitate to accept a secular song as a thematic source for a religious composition. Other religious melodies such as hymns or antiphons were also acceptable. Since unity in the composition was a goal, an easily recognized melody would readily connect the movements in the mind of the listener, and therefore popular secular songs or well-known hymns were frequently chosen as C.F. subjects.

The earlier C.F. masses used the melody quite simply in long notes above which was written a polyphonic texture unrelated to the melodic thread of the C.F. In further development of C.F. technique such devices as augmentation, di-

minution, inversion and cancrizans or crab motion are found.
Migration of the C.F. from voice to voice occurred in some
compositions and in others the C.F. was fragmented. In
Obrecht's Missa super Maria zart the C.F., a German Marian
song, is divided into twelve segments which are variously
presented in each of the mass sections, but not until the
last movement is the melody sung in its entirety.

Composers of the early renaissance tended to keep the
polyphonic voices thematically independent of the C.F., while
in works of later composers the C.F. thematic material often
permeated the entire fabric of the composition. As well as
masses based on religious melodies such as antiphons and
hymns, and on popular songs, some composers used abstract
themes including the sounds of nature as material for their
C.F. Johannes Martini, a late fifteenth-century composer,
wrote Missa Cucu using the familiar falling minor third of
the bird's song as a C.F. In the mass the call is sounded
at three different pitch levels.

In earlier C.F. masses the words sung by the C.F.
voice were those of the source. This led to textual confu-
sion, and because remnants of the practice extended into the
mid-sixteenth century it was one of the problems relating to
church music that was discussed at the time of the Tridentine
Council. Examples of multi-text masses are: Dufay, Missa

Ecce ancilla; Jacobus (or Jacques) Barbireau (ca.1408-1491),
Missa Virgo parens Christi; Gaspar van Weerbecke (ca.1445-
1514), Missa Ave regina coelorum. By the time of Palestrina
the practice had generally ceased.

Beginning in the latter part of the fifteenth century
there was a decline in the use of C.F. technique and a sub-
sequent rise in the development of other techniques such as
paraphrase and parody. Obrecht's Missa L'homme armé is uni-
que perhaps as it is not only a C.F. mass but it is also a
parody of a mass with the same name by Antoine Busnois (d.
1492). The C.F. portions are treated in much the same way,
the lengths of tenor sections and indeed the total lengths
of the works are identical. Structurally, the Obrecht work
follows the older model, even to inverting the theme in
Agnus Dei. Oliver Strunk has suggested that perhaps this is
a tribute by Obrecht "to the authority of his model."[1]

Both the use of paraphrase technique, which is an ex-
tension of the C.F. technique, and the writing of freely com-
posed works increased as the renaissance progressed.
Alexander Agricola (ca.1446-ca.1506), who had a bent for ori-
ginality, included in his Missa Malheur me bat sections of
free counterpoint interpolated into the C.F. sections.

---

[1]"The Origins of the L'homme armé Mass," Bulletins
of the American Musicological Society, June 1937, p. 25.

Antoine Brumel (ca.1475-ca.1520) in Missa De beata virgine
employs both C.F. and paraphrase techniques, and Jean Mouton
(ca.1475-1522) used the C.F. technique mixed with other tech-
niques in several masses.

The decline of C.F. and the ascendency of new methods
is emphasized by Clemens non Papa (Jacobus Clemens ca.1510-
ca.1558) who used the terms "ad imitationem moduli" or "can-
tilene" in place of "Missa super . . . ." Many other com-
posers of the later renaissance including Ludwig Senfl (ca.
1490-ca.1556), Cristobal de Morales (ca.1500-1553) and
Lassus continued to use C.F. techniques in various ways, but
nevertheless the terms "old fashioned," "obsolete" and "an-
cient" are now commonly applied in reference to its use dur-
ing the early and middle quarters of the sixteenth century.

Palestrina's Sources of C.F.

Palestrina used three sources for C.F. in his masses:
(a) plainsong melodies, (b) secular songs and (c) contrived
or abstract melodies. Sacred themes (from plainchant) are
used in at least seven of his masses; one secular song--the
famous L'homme armé--is the source for two; and there is one
mass which uses an arbitrary or abstract melody--the durum
(hard) hexachord--referred to as a solmization mass. The
subject of one of the C.F. masses has not been identified.

L'homme armé as a Source

The second of the three sources of C.F., the secular song, is represented in many masses written during the fifteenth and sixteenth centuries. These masses often used well-known songs, and in some cases, lesser-known songs some of which were further obscured by the mass title Sine nomine. French chansons were particularly popular; these included Se la face ay pale, De plus en plus and Fortuna desperata. In England a tune called Western Wynde was frequently used. The most popular of all secular sources for C.F. was the French chanson L'homme armé. In excess of thirty masses that use this theme are found in the works of composers from France, the Flemish areas, Spain, the British Isles, Switzerland and Italy. Composers include:

Phillippe Basiron (fifteenth century), Flemish
Antoine Brumel (ca.1475-ca.1520), Flemish
Antoine Busnois (d. 1492), French or Flemish
Philippe (or Firmin) Caron (fifteenth century),
   Netherlandic
Loyset Compère (ca.1455-1518), Flemish
Guillaume Dufay (ca.1400-1474), Flemish
Josquin Des Prez (ca.1440-1521), Flemish, two
   settings
Guilliame Faugues (fifteenth century), Netherlandic
Johannes Ockeghem (ca.1430-ca.1495), Flemish
Marbriano de Orto (d. 1529), Flemish
Giovanni da Palestrina (ca.1525-1594), Italian, two
   settings
Mathieu Pipelare (early sixteenth century),
   Netherlandic
Jean Regis (d. 1502), Flemish
Pierre de la Rue (ca.1460-1518), Netherlandic, two
   settings
Joannes de Tinctoris (ca.1436-1511), Flemish

Beltrame Vaqueras (early sixteenth century), Spanish

The origin of the tune is unknown and possibly dates from around 1430-1440. The earliest known source is a three-part setting found in the Mellon Chansonnier compiled about 1480.[1] The text of the song comes from two sources: the Mellon Chansonnier, and the six anonymous L'homme armé masses from Naples, all of which were discovered in recent years. The words of the chanson make reference to "le doubté turcq" (the terrible Turk) which probably links the text to the Turkish peril that still hung over Europe in the fifteenth century. It has been suggested that L'homme armé may have originated as a rallying song for a renewed crusade against the Turks.[2]

It seems that the renaissance frame of mind could easily correlate secular with spiritual thoughts. Jean Regis used the theme in conjunction with an antiphon for the feast of Saint Michael thus linking the "armed man" with the guardian angel, Michael. Morales, on the other hand, probably had in mind Charles V in his Missa L'homme armé.

The theme itself is well suited structurally to can-

---

[1]Manfred F. Bukofzer, "The Unknown Chansonnier of the Fifteenth Century," The Musical Quarterly, XXVIII (January, 1942), 14.

[2]Judith Cohen, The Six Anonymous L'homme Armé Masses (American Institute of Musicology, 1968), p. 20.

tus firmus treatment. It is in ternary form, of convenient length, with a combination of conjunct and disjunct movement and interesting rhythmic variety. It is shown in example 2-1 as used in one of the earliest of the mass settings, that of Busnois.

EXAMPLE 2-1 L'homme armé as in Busnois' mass

Alterations to the melody as shown in example 2-2 appear in the works of various composers. Busnois, Caron, de Orto, Tinctoris, Vaqueras, de la Rue, and Palestrina use B(1) as in example 2-1; Josquin, Dufay, Faugues, Regis and de Orto on one occasion altered the ending of the phrase as in ex- ample 2-2A. Ockeghem and Basiron manipulated the theme so that both forms of B(1) were used alternately. A further alternate shape of B(1) was used by both Josquin and Regis where a semitone rather than a tone separates the second and third notes of the phrase (Example 2-2B and 2-2C). Transpositions of the theme also produced this interval, as

illustrated in example 2-2D.

EXAMPLE 2-2   L'homme armé" alternative versions of part
        B(1)

The three-note bridge between A and B is used by Dufay,

Faugues, Basiron and Busnois; other composers such as

Josquin, Ockeghem, Caron, Regis, de Orto, Tinctoris, Vaqueras,

de la Rue and Palestrina omit these notes.

In most of the L'homme armé masses the theme is used

in either dorian or transposed dorian mode, although four of

the masses, Josquin's super Voces musicales a4, one by

Palestrina, and those by Ockeghem and de Orto, use the melody

in either mixolydian or transposed mixolydian mode. The

Ockeghem work employs mixolydian mode for all movements ex-

cept the Agnus Dei in which the theme is sung in transposed

dorian; the de Orto uses mixolydian in all movements while

Josquin used transposed mixolydian for the Kyrie and mixoly-
dian for Agnus Dei I.

The treatment of the C.F. in the masses varies with
each of the many composers who used it. Most L'homme armé
masses appear to use C.F. technique but some are more proper-
ly classified as paraphrase, or as primarily paraphrase
masses (Josquin, Missa Sexti toni; Regis, Missa L'homme armé;
Palestrina, Missa Quarta; the Christe and Credo of the
Tinctoris mass). L'homme armé masses by Caron, Ockeghem and
Basiron contain free polyphony in the C.F. voice after the
C.F. theme has been presented. The tenor voice normally
sings the C.F., but occasionally the C.F. is found in other
voices.

Dufay and Vaqueras wrote sections in which the C.F.
theme was sung in notes of short values, one phrase at a
time, separated by long periods of rests. On the other hand,
both Ockeghem in Et resurrexit and de Orto in Sanctus pre-
sented the complete theme more than once in a movement. In
the first part of the Sanctus of de Orto's mass, part A(1)
of L'homme armé is repeated five times in succession, each
time starting on a different note and with a different rhyth-
mic relationship. The starting notes themselves comprise an
acrostic of the phrase A(1) (Example 2-3).

EXAMPLE 2-3 de Orto, Missa L'homme armé: acrostic of
part A(1)
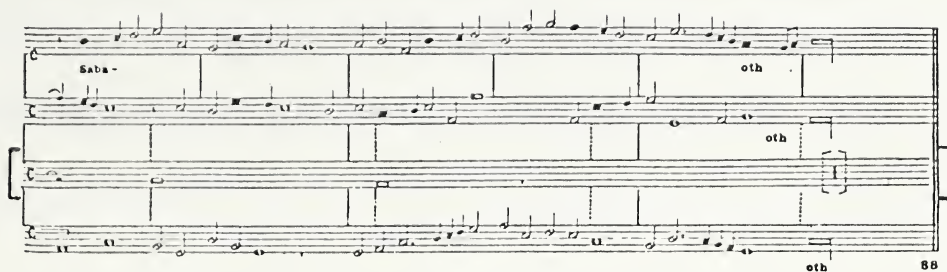
The procedure of singing the entire theme once
through in each movement was common, although in longer move-
ments, such as the Gloria and the Credo, the entire theme is
presented once in each section of the movement. Dufay used
the entire theme in the first section of the Gloria, then
used the complete theme again in the Qui tollis. Tinctoris,
Basiron and de Orto used the entire theme in Kyrie II and
Ockeghem, Dufay, Caron and Vaqueras used part A for Kyrie I,
B for Christe and A' for Kyrie II. There are cases in which
less than the complete theme is used in a long movement such
as the Gloria of the Vaqueras work where both A and B are
sung, but not A'. Usually the L'homme armé melody is divided
according to its natural phrases. In the Busnois, Vaqueras
and Tinctoris masses the theme is divided into two with the
point of separation occurring between B(1) and B(2).

Extensive use of canon is to be found in settings by
Faugues and Vaqueras in which two voices sing in canon at

various intervals and time periods. Usually the canonic
voices are the altus and the tenor, and in both masses the
technique is used extensively throughout the work. Some
masses have completely independent material in the polyphony
written around the C.F., but de Orto, Busnois and Tinctoris
used L'homme armé as thematic material for the other voices
as well as for the C.F.

Migrant C.F. is a technique in which the C.F. starts
in one voice for part of the theme then moves to another
voice for the next part and yet another for subsequent
phrases. In Kyrie II of Tinctoris' mass the C.F. starts in
the tenor for A, the altus takes over the C.F. for part B,
then A' is again sung by the tenor. In the Gloria at Domine
Deus the tenor sings part A, the superius part B(1), the al-
tus B(2), the superius B(3) and finally the tenor sings part
A'.

The rhythm of the C.F. in many of the masses is re-
lated to the rhythm of the L'homme armé theme. Long notes
are often used, maintaining the rhythmic relationship, but
sometimes the notes are elongated to such an extent that the
rhythmic pattern of the chanson is obscured. In many cases
added notes are to be found, and in some places the C.F.
voice abandons the C.F. theme for free polyphony.

In addition to the prolation technique described

above in de Orto's Sanctus (Example 2-3), of particular in-
terest are the following unusual treatments of C.F. in
L'homme armé masses: (1) Dufay, in Agnus Dei III, has writ-
ten above the C.F. "Cancer eat plenus, sed redeat medius."
The theme proceeds backward first, then is sung forward at
twice the speed.

EXAMPLE 2-4 Dufay, Missa L'homme armé, Agnus Dei III:
(a) the theme sung in reverse in tenor (38 bars)

(b) the theme sung forward in tenor at twice the
speed (19 bars)

(2) In Agnus Dei of Busnois' mass the theme is inverted.

EXAMPLE 2-5 L'homme armé inverted
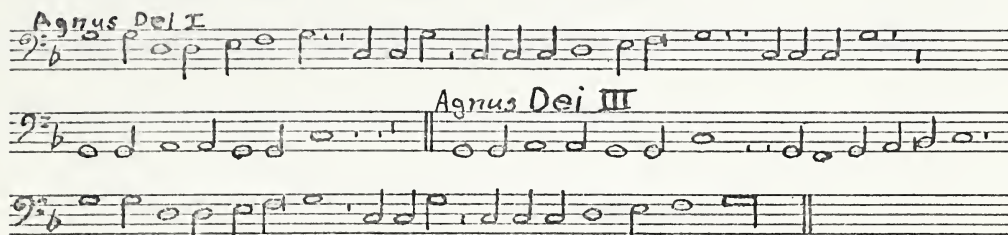
(3) Josquin's Missa super Voces musicales combines the C.F.
technique with solmization technique; L'homme armé rises pro-
gressively in each movement starting on ut in Kyrie, re in
Gloria, mi in Credo, fa in Sanctus, sol in Agnus Dei I and la
in Agnus Dei III thus combining hexachord and C.F. treatment.
(4) The six Neapolitan anonymous L'homme armé masses[1] are,
taken together, a unique example of coordinated composition.
They contain an extended use of fragmentation in which the
first five masses use in the tenor a portion of the L'homme
armé theme (divided as seen in Example 2-6). The fragmenta-
tion of the chanson seems to have been done in an arbitrary
manner without following the natural divisions of the melody.
Each part of the theme was used in its respective mass, not

---

[1]Discovered by Dragan Plamenac around 1924 and dating
from around 1465-1470. Cohen, Anonymous Masses, pp. 9 and 70.

entirely as a strict C.F., but also in a paraphrased way, sometimes highly elaborated with retrograde motion, inversions, sequences, etc., thus forming the scaffolding upon which the mass was constructed. The sixth mass is a C.F. mass utilizing the complete melody in the tenor, this time sung according to its natural phrasing.

EXAMPLE 2-6   Fragmentation of L'homme armé
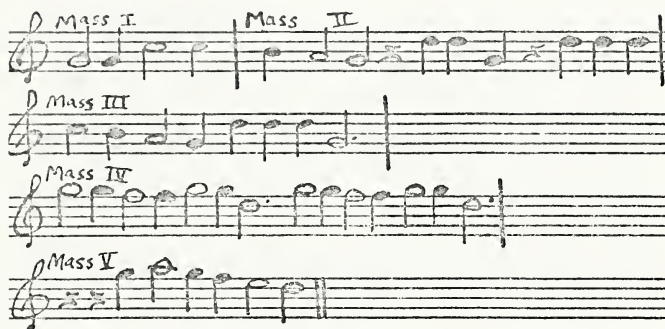
Solmization Techniques

The Hexachord
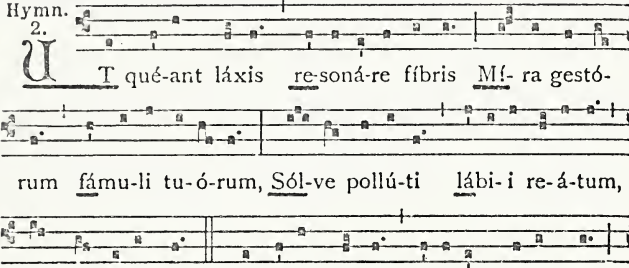
The development of solmization syllables originated with the eleventh-century theorist Guido d'Arezzo. The first syllable of each line of the Hymn to Saint John the Baptist was sung on a progressively higher note. Guido applied this scale of six notes, each with its own syllable, to a method of teaching sight singing. Later, French musicians used the syllables as fixed notes, ut for c, re for d, etc. The scale

was extended about 1650 with the addition of the seventh
note, si (later ti), which was probably derived from the
first letters of the last two words of the Saint John hymn,
Sancte Ioannes (Example 2-7). The more singable doh was sub-
stituted for ut.

EXAMPLE 2-7   Hymn to Saint John

Sáncte Jo-ánnes. 2. Núnti- us célso   véni- ens Olýmpo,

The method of devising a theme from the solmization
syllables is simply that of selecting the syllables in a de-
sired order, frequently but not always in a scalic sequence.
Palestrina used as his subject the complete hexachord in
scale--ut, re, mi, fa, sol, la. Juan de Esquivel (Spanish
composer of the late sixteenth and early seventeenth centur-
ies) wrote a hexachord mass for eight voices. Both Morales
and the Flemish composer, Brumel, used the complete hexachord
as C.F. for masses. In Brumel's Missa Ut re mi fa sol la, in

contrast to that by Palestrina, all three forms of the hexa-
chord are used in the C.F., ascending only, except in Agnus
Dei where both the ascending and descending forms are used.
In the last statement of the C.F., in Agnus Dei II, the C.F.
ascends and descends a fifth, not the complete six notes.
Pietro Vinci (ca.1535-1584) used the hexachord in reverse in
his Missa La sol fa mi re ut, and Josquin wrote a mass using
the incomplete hexachord in reverse but with a slight varia-
tion in the order, Missa La sol fa re mi. Solmization tech-
nique was also used in instrumental compositions by such com-
posers as William Byrd (1543-1623), John Bull (1563-1628),
Jan Sweelinck (1562-1621) and Girolamo Frescobaldi (1583-
1643).

Josquin utilized other solmization procedures as well.
In his motet O virgo prudentissima he changed certain notes
so that the solmization names of the new notes corresponded
with the vowels being sung (Example 2-8a). In other places
he changed notes in the reverse order--away from the solmiza-
tion syllable and vowel agreement (Example 2-8b). Another
motet with an almost identical name, Virgo prudentissima, also
contains a passage using solmization syllables. Near the end,
all the voices in succession sing the words "ut, sol" to the
respective notes of the hard hexachord. The bassus in parti-
cular repeats the syllables and notes many times.

EXAMPLE 2-8   Josquin, O virgo prudentissima:
(a)   notes changed to match solmization syllables

(b)   notes changed from solmization syllables

Josquin's motet Ut Phoebi radiis contains a C.F. in canon
which is an elaborate solmization pun. Each line of the poem
starts successively with ut, ut re, ut re mi, ut re mi fa,
etc., until the full hexachord is completed. The second
stanza starting with la, la sol, la sol fa, etc., reverses
the series. The bass sings the natural hexachord and is the
leading voice in the first stanza; the tenor sings the soft
hexachord and is the leading voice in the second stanza (see
appendix p. 121).

Heinrich Isaac (ca.1450-1517), in a motet Rogamus te
published by Petrucci, used as his theme a four-note solmiza-

tion motive, la mi la sol. The famous madrigalist, Luca Marenzio (1553-1599), also used this technique; in his madrigal Mi fa lasso languire he matches the words of the poem with the solmization syllables that the words suggest. This procedure comes close to the practice of soggetto cavato which is discussed below. A final example of solmization technique approaching the soggetto cavato method uses just two of the solmization syllables. In the Josquin motet Illibata Dei virgo nutrix[1] the tenor sings as a C.F. a brief solmization figure alternately on hexachords based on F and B^{b} (Example 2-9). The figure is la mi la which, because the text speaks of the virgin, may have been derived from her name, Maria (la-mi-la).

    EXAMPLE 2-9 Josquin, Illibata Dei virgo nutrix, secunda
                  pars

---

[1] There is an acrostic of the composer's name in the first part of the motet.

Soggetto cavato

Soggetto cavato means literally "carved subject," or as the theorist Gioseffo Zarlino (1517-1590) used the expression "cavato dalle vocali" (drawn out of the vowels of the words). In order to derive the theme, the composer used the vowels of either one or more words of a poem, a title or a name--frequently the name of a person of royal or aristocratic birth whom the composer wished to honour. Each vowel

is represented by a note with the appropriate solmization
syllable. The letter u is represented by ut, the letter i
by mi, the letter e by re, etc. The theme that is then dev-
eloped could be used as the C.F. for a composition, whether
instrumental or vocal, a madrigal or a mass. Vive le roy is
a four-voice composition (presumably instrumental since no
words are found with it) which was published in 1503 by
Petrucci in Canti C. The letter v is interchangeable with
u, and y is interchangeable with i. Substituting the sol-
mization syllables provides the following melody:

EXAMPLE 2-10   Josquin, Vive le roy

The resulting theme is played as a C.F. in the tenor in both
the natural and hard hexachords, and in notes of equal value
(one whole note to a bar, see appendix p. 119).

A well-known example of soggetto cavato occurs in a
mass by Josquin written in praise of Hercules I, Duke of
Ferrara; Missa Hercules dux Ferrariae. Disregarding the non-
sounding a in the diphthong at the end, the vowels in their
order of use are e u e u e a i e which, when solmized, give

the following notes:

EXAMPLE 2-11   Josquin, Missa Hercules dux Ferrariae: soggetto cavato theme

re ut re ut re fa mi re
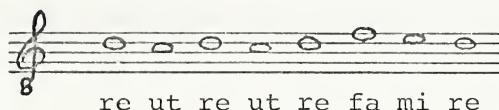
The theme is used in the tenor as a long-note C.F. and is sung in both the natural and hard hexachords. In the Kyrie (appendix p. 125) the C.F. is sung once in each of the three sections. The superius also sings the theme once in long notes starting at the beginning of the movement--probably to alert the listener to the homage being paid to the Duke--and following this statement the superius joins in the free counterpoint for the rest of the movement.

Two Dukes of Ferrara are each represented by soggetto cavato masses in their honour. A mass with only the name "Lupus" as the composer was published about 1532, two years before Hercules II became Duke. This mass seems to follow the Josquin example and is likewise entitled Missa Hercules dux Ferrariae, however the soggetto theme is slightly different (Example 2-12). Mutations produce variants of a theme. If the soft hexachord is used for notes 1, 2 and 4 of the theme and the natural hexachord for the rest, then

the first four notes (re, ut, re, ut) correspond to the
vowels in Hercules dux; the last four (re, fa, mi, re) to
the vowels in Ferrariae. This leaves two extra notes in
the middle indicated by the solmization syllables re and mi.
These may be derived from the Latin word erit which, if in-
serted into the full title, would then read Hercules dux
erit Ferrariae (Hercules will be Duke of Ferrara). Since
the mass was written prior to the time Hercules II succeeded
to the throne this seems a likely supposition.

     EXAMPLE 2-12 "Lupus," Missa Hercules dux Ferrariae:
                  soggetto cavato theme

re ut   ut   soft hexachord

re   re mi re fa mi re   natural hexachord

    Cipriano de Rore (1516-1565) wrote two masses honour-
ing Hercules II. The first derives a soggetto from Vivat
felix Hercules secundus, dux Ferrariae quartus which because
of three consecutive "uts" contains a mutation of hexachords.
The second entitled Missa Praeter rerum seriem is based upon
a motet of similar name by Josquin and may or may not use a
soggetto of the tenor words (Hercules secundus, dux Ferrariae
quartus, vivit et vivet. The number of vowels correspond
closely with the number of notes, but seven of the eighteen

vowels would need to be from mutated hexachords in order to fit the solmization syllables. The Flemish composer, Jacob Vaet (d. 1567 in Vienna), wrote a motet <u>Stat felix domus Austriae</u> in which there is an ostinato figure which is a <u>soggetto</u> derived from the title of the work. Johannes de Cleve (<u>ca</u>.1529-1582), a German tenor and composer, used this technique to derive subjects for two motets: <u>Carole sceptrigeri patris</u>, in praise of Archduke Charles and <u>Forti qui celebres</u> written to honour Emperor Ferdinand I.

———————————

CHAPTER III

CANTUS FIRMUS IN PALESTRINA'S MASSES

Having established the criteria to be used in deter-
mining which of Palestrina's masses are cantus firmus masses
(Chapter II), it was necessary to examine all of the masses
with special attention given to those which fall into three
categories: (a) masses that have been named as tenor or C.F.
masses, including different masses with the same names; (b)
about eleven masses which, though not specifically identified
as C.F. masses are contained in discussions relating to C.F.
masses by various authors; and (c) masses that appear visual-
ly to have C.F. in them.

Andrews states that Palestrina wrote seven C.F.
masses, but he names only two: Ecce sacerdos magnus and
Octavi toni (Festum nunc celebre).[1] Reese states that there
are eight tenor or C.F. masses, namely:

    Ecce sacerdos magnus
    L'homme armé

---

[1]H. K. Andrews, The Technique of Palestrina (London:
Novello and Co., 1958), p. 200.

Ut re mi fa sol la
Ave Maria
Octavi toni
Tu es Petrus
Veni Creator spiritus
Panem nostrum.[1]

Henry Coates names four:

De beata virgine
Ecce sacerdos magnus
L'homme armé
Hexachord (do re mi fa sol la).[2]

Based upon the three categories stated, the following forty-one masses needed to be examined more closely. This alphabetical list gives the volume and page number in the Rome edition.

Mass	No. of Voices	Volume	Page	Eliminated as a C.F. Mass
Ad coenam Agni providi	5	5	125	*
Ad fugam	4	4	78	*
Aeterna Christi munera	4	15	1	*
Aspice Domine	5	4	9	*
Ave Maria	6	21	142	
Ave Maria	4	23	1	*
Beatae Mariae virg(inis I)	5	18	83	*
De beata virgine	4	4	1	*
De beata virgine	6	6	175	*
De feria	4	6	84	*
Ecce sacerdos magnus	4	1	1	
Hexachord	6	6	220	
Illumina oculos meos	6	27	155	*
In duplicibus (minoribus I)	5	18	1	*
In duplicibus (minoribus II)	5	18	42	*
In festis Apostolor(um II)	5	19	43	*
In majoribus duplicibus	4	23	149	*

---

[1]Music in the Renaissance, p. 470-72.

[2]"Palestrina," Grove's Dictionary, VI, 512.

In semidupl(icibus) maior(ibus I)	5	19	87	*
Inviolata	4	4	26	*
Jesu nostra redemptio	4	10	38	*
L'homme armé	5	6	118	
Lauda sion	4	10	1	*
O admirabile commercium	5	24	52	*
Octavi toni	6	28	114	
O sacrum convivium	5	24	227	*
Panem nostrum	5	27	226	
Pro defunctis	5	1	164	*
Quarta (L'homme armé)	4	10	60	*
Repleatur os meum lauda	5	6	136	*
Salve regina	5	28	185	*
Salvum me fac	5	4	126	*
Sine nomine	6	1	182	*
Sine nomine	4	4	53	*
Sine nomine	4	19	168	*
Sine titulo	6	28	222	*
Spem in alium	4	6	1	*
Tu es Petrus	6	28	268	*
Tu es Petrus	6	29	123	*
Tu es Petrus	18	26	1	*
Veni Creator spiritus	6	25	246	
Viri Galilaei	6	29	159	*

Many of these forty-one masses can be removed from the list because they have no characteristic long-note C.F. in any of the movements, nor, on closer examination, do they meet any of the other C.F. criteria. These include Salve regina, Ad fugam and two of those entitled Tu es Petrus. With reference to the article "Mass" in the Harvard Dictionary which names Missa Salve regina as an example of a C.F. mass, Professor Willi Apel states that "this Missa Salve regina is not a cantus-firmus Mass by any standards."[1]

---

[1]A personal letter from Professor Apel to the author dated December 5, 1969.

Ten other masses can be eliminated from the list because the long notes are relatively few in number, some masses in only one or two movements such as Missa Aspice Domine, Missa Salvum me fac, Missa De profunctis and Missa De beata virgine a4, and some in all or almost all of the movements such as Missa O sacrum convivium and Missa Sine titulo.

There are a few masses, such as Missa Inviolate, Missa Jesu nostra redemptio and Missa Sine nomine a4 (R.19 p.168), that briefly use a C.F. in one or more sections, but the brevity and infrequency of its use, along with the emphasis on other techniques, necessitates removing these masses from the list of C.F. masses.

Six of the masses in the list are included in the ten Mantua masses that were discovered and edited by Knud Jeppeson in this century. They are published in Volumes 18 and 19 of the Rome edition, and in the case of most of them the plainsong on which each movement or section is based is printed on the page making it easy and informative to compare Palestrina's use of the theme to the original plainsong. Missa In duplicibus (minoribus II) a5 is a good example of one of these and it is also the one that contains the most C.F. elements. Some sections, such as Kyrie I, Christe and Kyrie II, use the first six to eight notes of the plainsong

as the subject in fairly long notes in one or more of the voices, after which they proceed freely. The first two pages of the Gloria quote the plainsong as C.F. usually in the pitch of the plainsong, but in bar 25 it is transposed a fifth higher. At et vitam venturi the plainsong is quoted through the whole section in tenor I in long notes as a typical C.F. In the complete Sanctus the plainsong is used as C.F., sometimes in note values that approximate the values in the other voices but also, as in pleni sunt coeli in the cantus, in long notes. The Agnus Dei uses a shorter quotation of the plainsong for its C.F.

This mass, along with others of the Mantua masses which use technique typical of a century or more earlier, is correctly termed a "plainsong mass" rather than a C.F. mass because each movement or section uses a different plainsong for its subject; there is no unifying C.F. from movement to movement. The mass contains strict C.F. in about a dozen of its forty-one pages but in the remainder the plainsong is employed in a paraphrase rather than in a C.F. fashion.

In the last eighteen bars of the Sanctus in Missa In majoribus duplicibus a4 one voice sings longer notes than the other voices. The entire Hosanna is a C.F. movement. Missa Ad coenam Agni providi a5 contains C.F. in the cantus throughout the Benedictus. There is a head motif in four of

the sections. For six or seven bars the motif is sung in long notes in canon between two voices, generally a cantus and an altus. Although each of these masses contains a complete section in C.F., neither should be classified as a C.F. mass because other techniques are used to a far greater extent.

Missa Quarta (L'homme armé) a4 is a paraphrase mass that uses the French chanson as its subject throughout. In Kyrie II the altus sings the C.F. in long notes using parts A(2) and A(3) of the theme. (The components of the chanson are given in example 2-1, p. 28.) This portion of the C.F. is a fifth higher than that used generally in the mass. In Kyrie I and Christe the C.F. is sung not in long notes but in rhythm integrated with the other voices. There is a five-bar section of the Gloria (an incomplete quotation of A3) that is sung in long notes in the altus but the rest of the movement uses paraphrased fragments of the theme in all the voices. Sanctus in the first twenty bars contains a migrant C.F. which uses only fragments of the theme. The rest of the movement is sung in either free polyphony or paraphrase. The Benedictus has a C.F. in the altus for the first twelve bars using all of part B of the theme sung through once. The last movement of the work contains C.F. combined with para-phrase treatment. In Agnus Dei I all of part A is sung as a

migrant C.F. in the cantus and bassus. The rest of the sec-
tion uses either free polyphony or paraphrase. In Agnus Dei
II the tenor sings a C.F. throughout using long notes.

The equivalent of almost six pages of the total of
eighteen in the mass contain C.F., and two complete movements
(Kyrie, Agnus Dei) may be classified as cantus firmus move-
ments. The principle compositional technique, however,
throughout most of the mass is paraphrase. Missa Quarta
therefore is a paraphrase mass containing C.F. elements.

Missa De beata virgine a6 (referred to in Grove's as
a C.F. mass) has the following C.F. features. There is a be-
ginning statement in long notes in both the Sanctus and
Agnus Dei I. As well there are C.F. portions in Sanctus,
Hosanna, Benedictus and Agnus Dei I and II. In each case
the C.F. is found in tenor II except in the Benedictus where
the altus sings the C.F. Of the forty pages of the work,
thirteen (or slightly less than a third) contain C.F., there-
fore this mass also should not be classified as a C.F. mass,
but as one using C.F. elements.

Missa Tu es Petrus a6 (R.29 p. 123) is the mass num-
bered 77 in the list by Reese, and noted there as a tenor or
C.F. mass. Cantus firmus is used in two places. The last
fifteen bars of the Kyrie contain a C.F. in tenor II which
corresponds with the last twelve notes of the antiphon, Tu es

Petrus.[1] In Agnus Dei II the antiphon appears as a C.F.

throughout the movement. At the beginning of other movements

there are a few notes, sometimes longer than the surrounding

notes,that quote the start of the antiphon, specifically in

Sanctus and Benedictus. In Agnus Dei I and II there is a

motif at the beginning consisting of the first notes of the

antiphon sung in long notes. On the basis that only five

pages out of thirty-five contain C.F.--only one complete

section and part of another--(about fourteen per cent), this

mass should not be classified as C.F. This conclusion is

confirmed by Professor Reese who states that this mass (Tu

es Petrus)" . . . is primarily a paraphrase rather than a

cantus-firmus mass."[2]

Of the 103 masses in the Rome edition of Palestrina's

complete works, forty-one listed above required close examina-

tion. Just over twenty contain any elements of C.F. and only

seven of these should be classified as cantus firmus masses.

---

[1]See Chapter IV, page 56, Example 4-3.

[2]A personal letter from Gustave Reese to the author
dated 13 April, 1970. In this letter Professor Reese further
stated that Missa Christus resurgens (no. 105 in his list of
masses) was not written by Palestrina. Robert Stevenson who
originally discovered the mass, later determined that it was
actually written by Pierre Colin (a sixteenth-century French
composer).

The seven Palestrina cantus firmus masses are:

Year Published	Mass	Number of voices	Source	Location in Rome Edition
1554	Ecce sacerdos magnus	4	antiphon	R. 1 p.1
1570	L'homme armé	5	popular song	R.6 p.118
1570	Ut, re, mi, fa, sol, la (Hexachord)	6	arbitrary	R.6 p.220
1596	Ave Maria	6	unidentified	R.21 p.142
1600	Octavi toni	6	hymn	R.28 p.114
1888	Veni Creator spiritus	6	hymn	R.25 p.246
1887	Panem nostrum	6	prayer	R.27 p.226

CHAPTER IV

THE CANTUS FIRMUS MASSES

MISSA ECCE SACERDOS MAGNUS

Missa Ecce sacerdos magnus is the first mass in the
Missarum Liber Primus of Palestrina published in 1554 by
Valerio and Aloysio Dorico. These two brothers worked in
Rome little more than half a century after Petrucci publish-
ed his Harmonice Musices Odhecaton A, which was the first
printed collection of part music. Palestrina's first book
of masses was dedicated to the reigning Pope, Julius III,
and was the first book of masses so dedicated by an Italian
composer. To honour Julius the insignia of the Pope was im-
printed in the Ecce sacerdos magnus mass at the beginning of
each statement of the C.F. (Example 4-1).

EXAMPLE 4-1 The Papal insignia at the C.F. entries

Chrifte Ecce facerdos magnus qui in die   bus
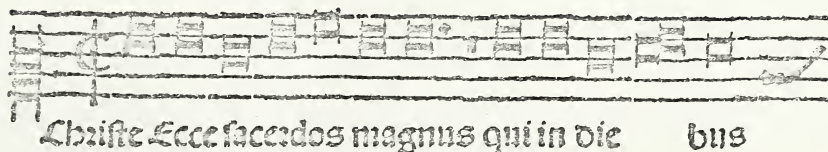
The frontispiece of Palestrina's first volume[1] was, as well,
a homage to the pope, picturing the composer kneeling before
the papal throne presenting a gift of music to Pope Julius.

The source of the C.F. for this mass is the antiphon
in honour of the confessor-pontif. A comparison of the
theme as used by Palestrina to the antiphon transcribed into
modern notation is shown in example 4-2.

EXAMPLE 4-2   The C.F. theme compared with the antiphon
Ecce sacerdos magnus
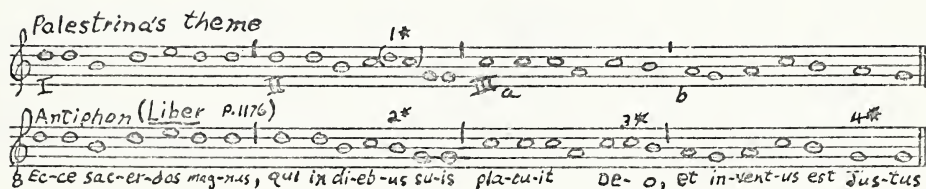
EXAMPLE 4-3   The antiphons Tu es Petrus and Ecce sacerdos
magnus
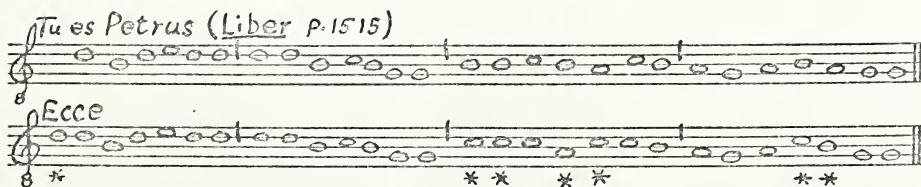
[1]See the frontispiece of this study.

There is a marked similarity between this antiphon and the antiphon <u>Tu es Petrus</u> which is the source for Palestrina's paraphrase mass by that name (Example 4-3).

Many plainsongs are used in the works of more than one composer. Nicholas Gombert (<u>ca</u>.1500-<u>ca</u>.1560) used <u>Ecce sacerdos magnus</u> in the <u>Agnus Dei</u> of his <u>Missa Quam pulchra</u>. Thomas Luis de Victoria (1548-1611) and Constanzo Porta (<u>ca</u>.1530-1601) also made use of <u>Ecce sacerdos</u> as a source for his motets.

Palestrina used the subject of <u>Ecce sacerdos magnus</u> in three parts as indicated in example 4-2 (I, II, III) with the third part on occasion subdivided (a,b) after "<u>Deo</u>." The differences between the two versions are indicated.

Kyrie

One of the characteristics of the old style of C.F. usage was the inclusion of extraneous words; in <u>Missa Ecce sacerdos</u> the C.F. voice sings the words of the antiphon. In the three sections of the <u>Kyrie</u> long notes of equal value (one to a bar) are used, the whole theme being sung through once in each section.[1] The three parts of the theme are separated by short rests only (whole rests, except once by a half rest); the rhythmic flow of the antiphon is maintained

---

[1]See Appendix, Examples 3 and 4, pp. 125 and 127, for C.F. using whole notes, one to a bar.

in the C.F. and the subject matter of the other three voices is generally independent of the C.F. The effect is of imitative polyphony surrounding the chanting of the theme. The C.F. in each case starts at the beginning of the section, sometimes alone. Within the movement the C.F. is migratory-- it is sung in Kyrie I by the superius, in Christe by the altus and in Kyrie II by the tenor--however, each section uses the C.F. in only one voice, not in a migratory fashion. The end of the C.F. coincides with the end of each of the three sections. In each Kyrie the pitch of the C.F. is as that shown in example 4-2, but in the Christe the C.F. is transposed down a fifth with the exception of the finalis which is raised one tone.

Gloria

The C.F. is sung three times in the Gloria, twice in the first section before Qui tollis, separated by one bar rest. Long notes of the same values retain the antiphon's syllabic rhythm, and the theme ends simultaneously with the end of the section. The pitch is as that indicated in example 4-2. From Qui tollis (bar 73) to the end, the theme is intoned once only but this time in long notes of irregular values. Parts I and II are separated by four bars rest and parts II and III are also separated by four bars rest. There is a four-bar rest at the end of the theme after which IIIb

is repeated with the last note of the C.F. elongated to the
end of the movement. The C.F. sung in the tenor voice com-
mences in the fifth bar in the first part of the Gloria,
and at the beginning in the Qui tollis. In the Kyrie and
the first part of the Gloria, even though the C.F. is sung
in long notes, the theme is clearly present. In the Qui
tollis as well as in parts of the Credo this is not the case.
The altered rhythm and the extended length of the notes of
the C.F. makes aural recognition of the antiphon theme diffi-
cult or even impossible.

Credo

In the Credo the C.F. is again in the tenor with the
theme starting well after the other three voices have made
their entries (bar 11). The first presentation is charact-
erised by extended long notes of irregular length and by
periods of rest. Eight bars rest separate IIIa from IIIb.
The second statement of the C.F. is similar to that in the
Kyrie. Crucifixus is sung by three voices with no C.F. The
first four notes (bar 102) of the imitative voices may per-
haps be a paraphrase of the first part of the antiphon. At
iterum venturus (bar 160) the theme is again sung twice as
a C.F. in the tenor, modified by regular rhythm at the be-
ginnings of the phrases and elongated rhythm at the ends.
There are rests between phrases, and again part III is separ-

ated into two. Six bars after the first statement the theme
is repeated with few irregularities. Part IIIb is then re-
stated after a four-bar rest with the C.F. and the other
voices ending together.

Sanctus

The Sanctus contains an alteration in the C.F. not
heard in earlier sections. In previous movements the entire
antiphon was used in the C.F., but in two of the five sec-
tions of the Sanctus only part I of the antiphon is used.
In the other three sections there is no C.F. The singing of
the C.F. in both Sanctus and Hosanna I is similar in that
part I is repeated three times separated by a few bars rest.
The repetition in each section is identical within the sec-
tion but the theme is varied slightly from Sanctus to Hosanna.
In the Sanctus there is elongation of notes 1, 4, 5, 6 and 7
of the subject. In the Hosanna the first four and the sixth
notes are properly placed, rhythmically, but notes 4, 5 and
7 are elongated.

EXAMPLE 4-4 Note values in C.F. of Sanctus and Hosanna I

Sanctus   o ♩ ♩ o o o o
             1 2 3 4 5 6 7
Hosanna I   ♩ ♩ ♩ o o ♩ o

The C.F. of the Sanctus is sung in the altus transposed down

a fifth and the C.F. of Hosanna I is in the tenor at the original pitch.

Both Pleni sunt coeli and Benedictus, each section in three voices, have an imitative portion of the antiphon in paraphrase; Hosanna II is a4 with no C.F. but its theme is comprised of the first six notes of the antiphon rhythmically modified and sung by all voices imitatively.

Agnus Dei

Agnus Dei is unique in this mass in that it consists of three sections. All other masses by Palestrina, with the exception of the requiem mass Pro defunctis a5, contain fewer than three sections within this movement.

In Agnus Dei I the superius again sings the C.F., starting in the fifth bar. It is sung once through in long notes with irregular rhythm, some notes elongated and some not. There are rests separating the parts of the theme, including IIIa from IIIb. Part III is the most irregular in rhythm and the C.F. ends with an elongated note.

Agnus Dei II contains only part I of the antiphon sung six times in the altus, separated by rests, as follows:

1. whole notes starting in the fifth bar transposed down a fifth

2. whole notes (bar 12) either one octave lower than those sung by the superius, or a fourth lower than that described in 1

3. same as 1, starting in bar 21

4. same pitch as 2, but mainly in half notes (bar 31)

5. same pitch as 1, but in half notes (bar 37)

6. same pitch as 2, and again in half notes (bar 44)

A final incomplete statement of the C.F. commences (bar 51) on the same pitch as 2, with the last two notes elongated. Agnus Dei III contains no C.F., but the superius and bassus sing a paraphrase of the first part of the antiphon.

Sections of the mass that do not use C.F. are Crucifixus, Pleni sunt coeli, Benedictus, Hosanna II and Agnus Dei III. There is minimal imitation of the antiphon in the polyphonic voices.

MISSA L'HOMME ARMÉ

L'homme armé is the thematic source for two of Palestrina's masses. The first is contained in the Third Book of Masses published in 1570 and the second, entitled Missa Quarta, was published in 1582 in the Fourth Book of Masses. Reference to the theme is also made in Missa Papae Marcelli (Example 4-5) where several passages resemble fragments of the armed man theme, particularly in the opening and final sections.

The transcription of early music into modern notation has been complicated by the need to interpret the early use

of relative note values or "proportions."

EXAMPLE 4-5 Resemblance of Part A1 of L'homme armé in
Missa Papae Marcelli

Kyrie

The speed at which a composition or passage was to be per-
formed was generally indicated by a time signature, not by
verbal indications (allegro, andante etc.). If the speed of
a passage was to be changed this could be done by changing
the time signature, which would result in an arithmetically
exact diminution or augmentation. The alteration of the time
signature would give a proportionally different pulse to the
notes thus either slowing them down or speeding them up.
Proportional complexities occur where different time signa-
tures are used in a composition, especially where two or more

signatures are used simultaneously in different voices.
Many examples may be found in Renaissance music, however by
Palestrina's time this practise, though still used, was de-
clining.

Missa L'homme armé is the work of Palestrina which
probably contains the most extensive and important use of
the proportional procedures of the past.[1] The C.F. has var-
ious time signatures differing from those of the other voices
to allow the fewer number of notes in the C.F. to be sung in
the same period of time. The Benedictus, for instance, has
the time signatures 𝄵 for the superius while the other
voices have the time signature 𝄵. The three time signa-
tures produce a diminution of note values in the C.F. for
each succeeding presentation (Example 4-6).

EXAMPLE 4-6 The C.F. in Benedictus
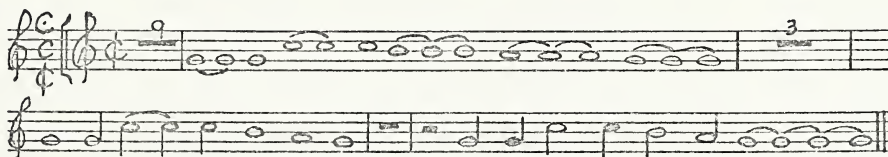
In Kyrie I the theme is in three-fold augmentation, ⊙ against
⊙ in the other voices. In Kyrie II the C.F. is assigned

---

[1]Andrews, Technique, p. 170.

the time signature ⟦𝄴 3/2⟧ in contrast to the other voices with

the signature ⟦𝄴⟧, this being referred to as "proportio

sesquialtera in combination with diminutio simplex."[1] Ex-

ample 4-7 shows the C.F. from a fragment of Kyrie II as rea-

lized in both the Rome and the Haberl[2] editions.

EXAMPLE 4-7 Fragment of Kyrie II from Rome and Haberl
             editions

This mass with its many proportional differences has created

problems in transcription and has been referred to as

Palestrina's "locus classicus of proportional conflict."[3]

L'homme armé, divided into the components as Palestrina

used it in this mass, is given in example 4-9. The theme is

identical to that illustrated in example 2-1 (p. 28) as used

by Busnois except that the part labelled "bridge" is absent.

---

[1]Andrews, Technique, p. 33.

[2]Pierluigi da Palestrina's Werke, ed. by Franz Xaver
Haberl (Farnborough, Hants, England: Gregg International Pub-
lishers Ltd., 1968, republished from Breitkopf and Härtel,
Leipzig, 1880.) 33 Vols.

[3]Andrews, Technique, p. 33.

EXAMPLE 4-8   Palestrina's L'homme armé C.F.
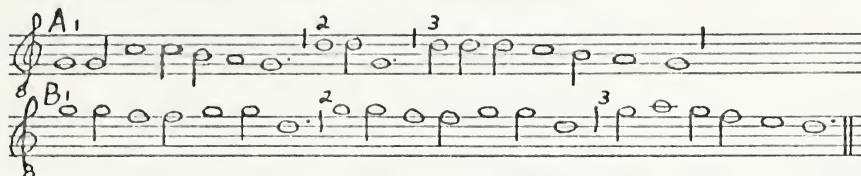
Palestrina used the theme in the mixolydian mode in contrast
to the dorian mode used in his Missa Quarta (see p. 51) and
in all but four L'homme armé masses mentioned earlier in this
study. The C.F. is sung generally by either tenor I or tenor
II except in the Benedictus where it is sung by the cantus.
The Crucifixus is the only section without a C.F. Unifica-
tion is achieved not only through cantus firmus but by para-
phrase procedures in other voices throughout the mass.

Kyrie

The C.F. theme is used as the subject for the imita-
tive polyphony in each section of this movement and the poly-
phonic thematic material for each section starts with the
portion of the chanson that is used as the C.F. in that sec-
tion. The C.F. in Kyrie I starts typically as the last voice
to enter (tenor I, bar 10) but, because of the imitative en-
tries of the other voices, the theme is heard four times be-
fore tenor I enters. The notes of the C.F. are long but the

relative rhythm of the chanson is maintained. Part A1 of
the theme is used as the C.F. in Kyrie I, A2 and A3 in the
Christe, and all of part B in Kyrie II. In the first two
sections of the movement the portion of the theme used as
the C.F. is sung through once in long notes, but in Kyrie II
the C.F. is sung three times in notes of short value. The
first time it is at the pitch established at the beginning,
but the next two entries (starting bar 69) are transposed
down a fifth.

Gloria

Following twelve bars rest, tenor I, the last voice
to enter, sings the C.F. in unusually elongated notes, how-
ever the rhythm is still based upon the chanson rhythm.[1]
Three bars in the C.F. represent one beat of the chanson for
part A1 with one and a half bars for each beat of A2 and A3.
Part A is sung completely through once with each part of the
theme separated by many bars rest. In Qui tollis, part B is
sung completely, again in long notes but with a more clear
resemblance to the chanson rhythm, at least for B1 and B2.
One whole note of the C.F. is equivalent to one beat of the
chanson. The entry of B3 is delayed from bar 106 to bar 118
and appears in elongated and equal note values. B3 is repeat-

---

[1]See Appendix, Example 5, p. 130.

ed with a change in time signature, reducing the note values
by one half. In both uses of the chanson theme (pp. 28 and
66) the third note of part B is a tone lower. This interval
is the one used by most composers in L'homme armé masses,
however there are a few examples, although very few, where
this interval is a semitone instead of a tone. In Qui tollis
Palestrina used the smaller interval in bars 85 and 97.

Credo

        In the Credo the C.F. starts (as it did in Kyrie I)
in bar 10 and is the last voice to enter. It is sung in
tenor I in elongated notes, resembling the chanson rhythm.
A C.F. is often sung once only in a long movement with few
rests separating the parts and notes elongated as necessary.
The Credo is an example of this. Of the ninety-three bars
of music from the start of the C.F. to the end of the move-
ment the C.F. sings in eighty-three of them, yet the theme
is sung through once only. The relative speed of the C.F.
allows about four bars of long notes for each bar of the
theme.

        The Crucifixus contains no C.F. At Et in Spiritum
(bar 165) the C.F. resumes again in tenor I in triple meter
with one beat of the chanson tune occupying one bar in the
C.F., and rhythmically imitating the chanson. Parts A and
B1 are used. At Et exspecto (bar 213) the meter returns to

duple and the C.F. continues with parts B2 and B3. Despite
the change of meter from triple to duple, the rhythm of the
C.F. voice remains in triple meter for a few bars.

EXAMPLE 4-9   Duple and triple rhythms at _Et exspecto_

After completion of part B, B3 is immediately repeated a
fifth lower in pitch using only whole notes. In bars 212 and
218, which correspond to the ends of parts B1 and B2 respec-
tively, an extra beat is inserted by the repetition of the
last note.

Sanctus

In _Sanctus_ the C.F. is again the last voice to enter,
starting in bar 7 in tenor I. It is sung in long notes in
irregular rhythm and, following the complete presentation of
part A, A3 is repeated. It has been mentioned that paraphrase
treatment of the C.F. occurs in all four polyphonic voices.

This treatment includes contrapuntal entries in most in-
stances before the singing of the theme by the C.F. voice.
In the Sanctus the cantus sings part Al prior to the entry
of the C.F. but here it has the appearance of a C.F. with
long notes in contrast to the faster moving free counter-
point which it later sings when the C.F. voice enters.

In Pleni sunt coeli tenor I sings part B and a repe-
tition of B3. The rhythm of the C.F. in both sections is
somewhat irregular but in a general way follows that of the
chanson.

The rhythm and note values are incorporated with the
other voices into the general texture in Hosanna so that the
visual appearance is not that of cantus firmus. It is a can-
tus firmus however, as the tenor sings only the chanson tune
without embellishments or paraphrase, except that B3 is re-
peated twice following the initial presentation of B, first
at the same pitch and then a fifth lower. In some masses,
Palestrina employed canon between a C.F. and another voice,
most frequently in a movement such as Agnus Dei II where
there is often an extra voice added. This Hosanna, not hav-
ing an extra voice, is an exception. The bassus sings in
canon following tenor II through the complete section of the
movement. The interval of the canon is altered from a fourth
lower in bars 79-81, to a fifth lower for most of the section,

and again to an octave lower in the final statements of B3.
The time interval at which the bassus follows also varies
according to the length of the fragment involved. The bassus
always starts in either the final or the penultimate bar of
each phrase sung by tenor I. The last statement in tenor I
of B3 is not answered by the bassus, but its absence is bal-
anced by the first entry of the bassus at the beginning of
the section where it sings A1 prior to the entry of the C.F.
at the same pitch as that used by the tenor. All the other
polyphonic voices utilize fragments of the theme in para-
phrased counterpoint.

The C.F. in Benedictus is sung in the cantus . In
this section long notes are used starting in bar 10 after all
the other voices have entered. The rhythm is altered, but it
is not entirely removed from the chanson rhythm. As illust-
rated in example 4-6, p. 64, only A1 is used in this section
and it is repeated three times, each time similar to the
first except there is a continuous diminution produced by
halving the length of the notes progressively in each repe-
tition (bars 28, 35).

Agnus Dei

In Agnus Dei I the C.F. returns to tenor I. Parts
A1 and A2, using the chanson rhythm in whole and half notes,
commence in bar 7. In bar 20, part A2 is repeated and A3 is

sung in a distorted rhythm, mostly in short notes (Example
4-10). In view of the stateliness with which the C.F. is
usually sung this passage is remarkable in its rhythmic ir-
regularity.

EXAMPLE 4-10   Irregular rhythm in the C.F.

In bar 26 the C.F. sings B1 and B3 in the chanson rhythm with
rests separating each section. Part B2 is omitted. In bar
28, after B1 has been sung in the C.F., the bassus sings a
repetition of B1 which overlaps B3 in the C.F. (bar 30).
This may be regarded as a migrant C.F. with the bassus sing-
ing B2 (Example 4-11). It is the only place in the mass that
has even a hint of migrant C.F., in fact Palestrina seldom
used this procedure. Five bars after the completion of part
B, B3 is repeated not only thematically but also rhythmical-
ly. This repetition is transposed down a fourth in pitch and
is followed by a further repetition of B3 transposed down an
additional tone. When tenor I has finished singing B3, at
bar 33, B3 is repeated with the bassus and tenor II singing
in thirds. In Agnus Dei II the C.F. is again sung by tenor I
starting at the beginning of the section. Part A only is

sung once in elongated notes having little rhythmical simi-
larity to the chanson.

EXAMPLE 4-11   Brief migration of C.F.

MISSA UT, RE, MI, FA, SOL, LA

The Hexachord mass for six voices was originally
published in 1570 in the Third Book of Masses. However it
had been copied into the choir books of the Sistine chapel
about 1563 while Palestrina was director at Santa Maria
Maggiore. Even though Palestrina had been relieved of his

duties at the Vatican by this time, they apparently were pre-
pared to use his music there.

This is one of the few masses in which C.F. is used
in every section of each movement of the mass.[1] It is found
in the same voice (cantus II) in all sections except one,
the Benedictus, which is a four-voice section, and which has
the C.F. in the cantus. The C.F. used is the hard hexachord
starting on g and ascending and descending at the same pitch
throughout the work. Imitation of the C.F. theme in the
other voices occurs in a number of places, using both the
hard and natural hexachords. The soft hexachord is not used
in this work.

Kyrie

The C.F. starts typically after most of the other
voices have entered (bar 9). The other voices anticipate
the subject in first the natural, then the hard hexachord
(Example 4-12). Cantus II sings the hexachord in whole notes
ascending, then, after four bars rest, descending in whole
notes to the end of the Kyrie. In the Christe the note values
for the C.F. are doubled, and again the C.F. ascends and

_____

[1]Generally, in every mass of the period from Dufay in
the early fifteenth century to Carissimi in the early seven-
teenth century the C.F. is omitted from one or more sections
or movements--usually either the Crucifixus or Et incarnatus
which are the sections traditionally sung by fewer voices.

EXAMPLE 4-12   Opening of the Hexachord mass

Kyrie.

descends once.   In Kyrie II the C.F. is sung three times up

and down, first in whole notes, then in half notes, then in

quarter notes.   Throughout the mass rests are used in the C.F.

voice, but they are not long nor are they frequent.   The C.F.

voice is seldom idle.

Gloria and Credo

In both the Gloria and the Credo the C.F. is rhyth-
mically integrated into the texture of the other parts, some-
times in homophonic style, sometimes polyphonic (Example
4-13). The C.F. is not immediately apparent, visually.

EXAMPLE 4-13   Rhythmical integration of C.F. in the
Gloria[1]

Gloria.

Cantus II constantly sings the tune up and down numerous times in each of the sections of both <u>Gloria</u> and <u>Credo</u>. In only two sections does the C.F. commence with other than the ascending pattern. In <u>Et in Spiritum</u> (bar 136) in the <u>Credo</u> the subject starts at the top but after its many repetitions up and down it ends at the bottom. Two bars before the end of <u>Qui tollis</u> (bar 92) the ascending theme stops short at the third note from the top of the hexachord (Example 4-14). When the voice starts again in <u>gloria Dei patris</u> (bar 95) the C.F. continues upward beginning on the second last note of the hexachord, then descends to the bottom. After almost five bars rest the incomplete ascent followed by the descending hexachord is repeated.

EXAMPLE 4-14   Interruption of hexachord at section end

In the Crucifixus the C.F. voice descends to g# instead of
g (bar 95) and resolves to a (Example 4-15). Two bars later
the original hexachord is restored.

EXAMPLE 4-15   Irregular descent of hexachord

This is the only occasion when there is an accidental in the
C.F. and one of the few times when the hexachord is altered.

Sanctus and Agnus Dei

The Sanctus and Agnus Dei I have the C.F. in notice-
ably long notes against which the polyphony of the other
voices is woven. The hexachord both ascends and descends
many times with few rests.

In Agnus Dei II the C.F. appears in two voices. The
altus III sings in canon starting a fifth below and one bar
later than cantus II. The two-voice canon in whole notes,
while ascending (bars 5 to 9), produces a series of parallel
sixths (Example 4-16A). Descending in a similar manner would
have produced a series of parallel fourths (Example 4-16B),

which Palestrina avoided by changing the time values of the
descending hexachord (bars 13 to 17) producing a variety of
intervals, some suspended (Example 4-16C). In the repetition
(bars 30 to 33) the rhythm is varied producing a different
set of intervals (Example 4-16D).

EXAMPLE 4-16 Control of a series of parallel intervals

After altus III finishes the canon the third time it sustains
the last note for five bars while cantus II repeats the de-
scending hexachord one final time.

MISSA AVE MARIA

The first three C.F. masses were published by
Palestrina at least twenty-four years before his death. The
next four were published posthumously, two by his son Igino
in 1596 and 1600 respectively, and two some three centuries

later. The C.F. mass Ave Maria a6 was the one published in
1596 (in the second edition of Sixth Book of Masses) by
Igino two years after his father's death.

This is the only mass of the seven for which the
source of the C.F. theme has not been identified. It is one
of two masses, the other being Ecce sacerdos magnus, that
has extraneous words sung by the C.F. voice. The Ecce sacer-
dos magnus mass contains the words of the antiphon in the
C.F. voice and the Ave Maria contains the words Ave Maria
gratia plena. In the case of the Ave Maria the words are al-
ways sung to the same notes.

EXAMPLE 4-17   C.F. melody and text for Missa Ave Maria

The words themselves seem to act as a C.F. because each syll-
able is used on the same note or combination of notes every
time the C.F. is presented.

The dates of composition of many of Palestrina's
works are difficult to establish. Missa Ave Maria may be an
early work despite its late publication, first because of a
similarity to the first mass in treatment of C.F., secondly
because of the use of extraneous words, which was in conflict

with the directives emanating from the Council of Trent, and
thirdly because of some of the dissimilarities in the treat-
ment of the C.F. compared to the other posthumous masses.

The theme is a ten-note phrase (Example 4-18). In
Palestrina's use the form becomes A A' A, with the middle
part, A', a restatement of A transposed up a fifth.

EXAMPLE 4-18   C.F. of <u>Missa Ave Maria</u>
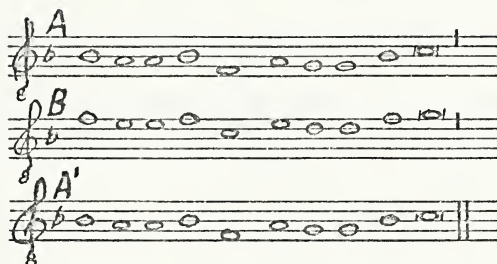
In this mass more than in any other of the C.F. masses,
Palestrina used a consistent pattern in the C.F. voice. The
pattern is as follows:

rests	part A	rests	part A'	rests	part A	extended
10½ bars	10½ bars	10½ bars	10½ bars	10½ bars	10½ bars	last note

The last note is always extended in varying length from sec-
tion to section.

Kyrie

The C.F. in <u>Kyrie I</u> consists of part A which enters

after all other voices have entered (bar 11). The last note is extended for five and one half bars to the end of the movement. Part A' is used in the Christe and part A in Kyrie II with the same note values and the same number of bars rest prior to the entry of the C.F.

Gloria

The C.F. in Gloria is sung exactly according to the above pattern with the last note extended for two bars until the beginning of Qui tollis. Only parts A' and A are used in the Qui tollis and these are used in accordance with the pattern.

Credo

The rests and note values in the first part of the Credo are doubled in the C.F. using parts A and A'.[1] The Crucifixus contains no C.F. At Et in Spiritus the pattern continues with regular rest and note values and with parts A and A' comprising the C.F.

Sanctus

Parts A and A', following the pattern, are used in

---

[1]The Rome edition has the syllable "Ma" of Maria sounding in bar 27 of the Credo. It should sound in bar 28 according to the doubling formula.

both Sanctus and Pleni sunt coeli.[1] Hosanna is changed from duple to triple time and the C.F. starts after twenty-one bars rest with only part A sung. In Benedictus however, the C.F. is used in the pattern with both parts A and A' sung.

Agnus Dei

The C.F. in Agnus Dei I a7 also follows the pattern using both parts A and A'. Agnus Dei II contains the augmented version of the C.F. as sung in the Credo with only part A used and with the last note extended for seven bars.

There is some imitation of the C.F. in this mass, as there is in all Palestrina's C.F. masses, notably at the beginning of the Kyrie and in the Sanctus.

MISSA OCTAVI TONI

Missa Octavi toni was published in 1600, six years after Palestrina's death, as part of the Eleventh Book of Masses. It is written for six voices and is one of the three Palestrina masses in which the C.F. is sung in only one voice. The source of the melody is the hymn Festivis resonent. The differences between the plainsong as found in modern editions and that used by Palestrina are shown in example 4-19. The theme for this mass, containing sixty-seven notes in seven distinct parts, is the longest used by Palestrina in any of

---

[1]See Appendix, Example 7, p. 141.

the C.F. masses.

EXAMPLE 4-19   The C.F. theme and Festivis resonent

The mass is named after the eighth mode (hypomixolydian) which is the mode of the hymn Festivis resonent.

Imitation of the C.F. in other voices is found in this work, and the beginning of the Kyrie is notable--part 1 of the melody is sung by paired voices with tenor and quintus at the unison, and bassus and altus at the octave, each pair with a different rhythmic structure, and each pair entering canonically with the melodic fragment. The cantus imitates the C.F. in a third rhythmic pattern.

EXAMPLE 4-20   Rhythmic entries of <u>Octavi toni</u>

Kyrie

The C.F. sung in cantus II (<u>sexta pars</u>) starts after all the other voices have entered. In <u>Kyrie I</u> it is sung in whole notes, one note to a bar, and comprises parts 1 and 2 of the theme. In <u>Christe</u>, the C.F. consists of parts 3 and

4 sung in half notes. Parts 5, 6 and 7 are used as the C.F.

in Kyrie II, again sung in half notes.

Gloria

In the Gloria the theme is sung as a C.F. but is rhy-

thmically integrated with the rest of the voices, much of it

in homophonic style.

EXAMPLE 4-21 Integration of C.F. voice in Gloria

Generally, one note of the theme is sung to one bar, but the

note values in the bar are varied to integrate with the

other voices. The theme is sung through once with rests se-
parating the parts of the theme. The only variation to this
pattern is from bar 94 to the end where cantus II repeats
the first four notes of part 7, then repeats the whole of
part 7 ending with an extended note.

Credo

In the Credo the whole theme is sung in the C.F.
voice before the start of Crucifixus. The C.F. is rhythmi-
cally integrated with the texture of the other five voices
so that visually it is not readily apparent. The Crucifixus
a4 has no C.F. From Et in Spiritum the entire theme is in-
corporated into the rhythmic structure with the exception
that part 7 is sung in slightly longer notes from Et vitam
(bar 195) to the end. An unusual example of modification to
the C.F. occurs in bar 185 where the leading note is delayed
by suspension and ornamentally resolved.

EXAMPLE 4-22 Ornamental resolution in C.F.

Generally, the rhythmic interest is in the other voices, not in the C.F. voice, but in this bar the only movement is in the C.F. voice. In bars 62, 67, and 76 of this movement the same procedure is found, these four being the only cases of added notes found in the C.F. of any of Palestrina's C.F. masses. In bars 62 and 76 movement occurs simultaneously with activity in other voices, not by itself.

EXAMPLE 4-23   Further ornamental resolutions in C.F. voice

Sanctus

In the Sanctus the cantus sings a fragment of part 1 of the theme in long notes before the entry of the C.F. in cantus II. This time the C.F., using parts 1, 2, 3, and 4, is characteristically in long notes, either whole or half. In Hosanna I, parts 5 and 6 are sung in triple rather than

duple meter and the C.F. rhythmically joins with the other
voices until the last five bars, throughout which the last
note is sustained. Only part 7 is used in the Benedictus;
it is sung three times, in whole notes the first two times,
then in half notes the third time. Hosanna II contains parts
5 and 6 rhythmically integrated into the general texture.

Agnus Dei

In Agnus Dei I the C.F. is treated in a typical man-
ner with all seven parts of the theme sung in half notes.
In Agnus Dei II, cantus II joins the polyphonic texture sing-
ing the whole theme once through and concluding with a repe-
tition of part 7. The theme of the imitative sections is a
paraphrase of the C.F.

MISSA [VENI CREATOR SPIRITUS]

Missa Veni creator spiritus a6 lay in the choir re-
cords for three centuries before it was published in 1888.[1]
The C.F. uses the hymn for Pentecost, Veni creator spiritus,
which is in four phrases.

-----

[1]It had been copied into the Pontifical Chapel Codex
57 during the sixteenth century. In the codex it is without
a title which accounts for the use of the square brackets in
the Rome edition.

EXAMPLE 4-24   The C.F. theme and <u>Veni creator spiritus</u>
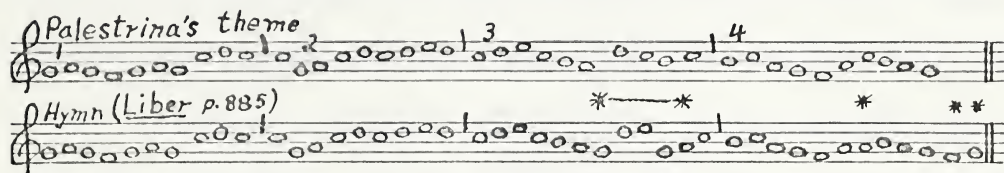
Kyrie

The C.F. of <u>Kyrie I</u> and <u>Christe</u> each contain two parts of the plainsong, with each starting after other voices have entered. It is sung in whole notes with a bar rest separating every section of the theme. In each case the polyphonic voices around the C.F. use material that has been taken from the hymn. In the <u>Kyrie</u> the contrapuntal voices use the first few notes of part I, and in the <u>Christe</u> the first few notes of part 3. In <u>Kyrie II</u>, the C.F. sings the complete hymn in half notes, with rests separating each part of the theme, and with part 4 repeated.

Gloria

The theme in the <u>Gloria</u> is sung twice; in the first section and again in <u>Qui tollis</u> every note of the theme occupies one bar, with rests of a few bars length separating each part of the theme. The C.F. voice sings only the theme with no extraneous notes, although an occasional accidental is used. The typical C.F. appearance is absent because the

rhythm of the C.F. voice is integrated with that of the other
voices both in homophonic and in polyphonic sections. There
is some overlapping of C.F. from section to section; for in-
stance, there is a section ending and a change of meter in
bar 103 (in gloria, Example 4-25) but the C.F. continues for
two more bars into the succeeding section.

EXAMPLE 4-25 C.F. overlapping from section to section

part 3 of C.F.

Credo

In the Credo the C.F. combines long notes with rhyth-
mic integration, the long notes occurring mainly at the end of
each part of the theme. Rests separate the four sections of
the theme and part 4 is repeated. A C.F. is not used in the
Crucifixus. In Et in Spiritum, cantus I sings the theme
through once, using rests to separate the parts and with the
rhythmic patterns of the other voices integrated with the

C.F. most of the time. Part 4 uses long notes and less integration ending on a note held for the final five bars.

Sanctus

The Sanctus has the usual long note C.F. appearance with the other voices imitating the theme. In Hosanna I part 4 of the theme is sung in triple rhythm, still one note to the bar except that the last note is held for six bars. In Benedictus, although the C.F. is sung in cantus I in long notes and with rests separating the sections, the C.F. ends abruptly on the fourth last note of part 3. In Hosanna II the C.F. starts afresh with the complete theme presented in long notes.

Agnus Dei

Cantus I has the C.F. in Agnus Dei I with the theme sung in long notes starting in the second bar. Agnus Dei II contains a section with proportional conflict. The cantus is marked ⊕ while the other voices are marked ¢; thus two bars of the C.F. equal three bars of the other voices. Parts 1, 2, and 3 are sung in this way (Example 4-26A) with long notes in the C.F. (dotted whole notes). At the beginning of part 4 (bar 49) the C.F. meter changes so that the bars are equal, a change that gives the aural impression of a slight increase in speed of the C.F. through part 4 (Example 4-26B). The

movement ends with the C.F. sustaining the last note of the
theme for five bars.

EXAMPLE 4-26   Proportional conflict and meter change in
Agnus Dei II

MISSA PANEM NOSTRUM

The theme used as the C.F. in Missa Panem nostrum is
a portion of a plainsong setting of Pater noster (see p. 102).
As used by Palestrina, it has an A A' A structure, A' being
the same melody as A transposed a fourth higher. Part A can
be subdivided into three with the first phrase consisting of
nine notes, and the second phrase six notes; the third is a
repetition of the second. The whole theme is sixty-three
notes long which may be considered as two basic components
totaling fifteen notes.

EXAMPLE 4-27   The C.F. of Missa Panem nostrum
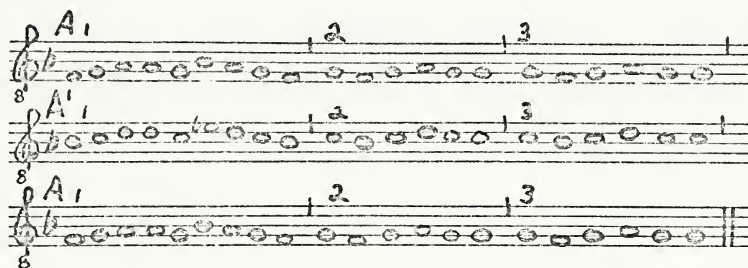
Kyrie

The C.F. in Kyrie I enters after all the other voices
(bar 11).[1] The imitative polyphony is a paraphrase of the
first few notes of the C.F. The contrapuntal voices of
Christe and Kyrie II are independent of the theme. The C.F.

---

[1] See Appendix, Example 4, p. 127.

is used in an identical fashion in all three sections of the movement. Kyrie I contains the C.F. singing part A, Christe part A' and Kyrie II part A, each having successive notes of the theme in whole notes, one to a bar. There are ten bars rest prior to the entry of the C.F. in each case, and two bars rest separate the three parts of the theme in each of the three sections of the Kyrie. At the end of each section the last note is extended.

Gloria

In the Gloria the C.F. starts in bar 11 again using one bar for each note of the theme, however, as in many of the later C.F. masses, the note values in the bar are varied in order to rhythmically integrate all parts. The theme is sung in this way for all of part A after which there are five bars rest, then part A' is sung with half the note values of A. The section ends with an extended long note. Qui tollis contains part A using exactly the same pattern, including the length of the rests, as found at the beginning of the Gloria. One note of the theme is sung in each bar and the note values in the bars are varied to integrate the other voices in A1 and A2, but A3 (bar 85) is sung primarily in whole notes. After five bars rest, part A is repeated using half notes and ending with a three-bar extended note.

Credo

The C.F. in the Credo is again in the quintus. It starts in bar 11 using one note of the theme to a bar. Two bars rest separate each part of the theme and the C.F. is rhythmically integrated with the other voices. Ten bars rest separate part A from part A'. Part A' is sung in the same manner except that A'3 is not integrated rhythmically but is sung in long notes. The Crucifixus is without C.F. The pattern started at the beginning of the Gloria and in the Credo continues in Et in spiritum. Part A is rhythmically integrated into the texture and is sung at the speed of one note of the theme to one bar, it is then repeated (bar 162) at twice the speed before the end of the movement.

Sanctus

The first two movements of this work use the first five notes of the theme as material for the contrapuntal voices. In the Credo the cantus sings the whole of A as part of the homophonic texture prior to the entry of the C.F. In the Sanctus, the theme is used to a greater degree in the polyphonic texture of the movement, especially at the beginning.

The note values of the C.F. in the Sanctus are twice the length of those in other movements. Twenty bars rest occur before its entry, and although it is partly integrated

into the texture by the use of half notes, each note of the
theme lasts two bars instead of one. Four bars rest separ-
ate A1 from A2; part A3 is absent. Benedictus contains the
C.F. using one note of the theme in each bar. The meter
changes to triple in the Hosanna II (bar 39) and the C.F. is
still sung with one note to a bar. In this section part A
is sung through once with no rests separating the parts of
the theme. The last note is extended for two bars.

Agnus Dei

In Agnus Dei I the pattern is repeated. Following
ten bars rest A1 is sung in whole notes (with some divided
in two); after seven bars rest, A2 is sung the same way,
then following two bars rest A3 is sung in whole notes with
the last note extended for three bars. In Agnus Dei II a6
the first four notes of the theme are sung in whole notes by
both the cantus and the tenor after which each continues con-
trapuntally (Example 4-28). The altus, after its initial
contrapuntal entry also sings this four-note phrase. As in
every movement of this mass, the quintus sings the C.F., but
in this section it is followed by tenor I in canon one bar
later and a fifth higher. The C.F. is in whole notes for
most of the movement except for a few half notes in the latter
portion of part A1, and there are the usual two bars rest

EXAMPLE 4-28 Opening bars of <u>Agnus Dei II</u>

Agnus Doi II

separating each of the parts of the theme. Only part A is

used with A3 ending four bars before the end of the work.

One bar rest then separates a repetition of the last two

notes of the theme and the last note is doubled in length

(Example 4-29). Usually, the last note is extended until

the end of the work without a rest, but in this case

Palestrina indicated the conclusion of the canon (bar 36) by

inserting the rest.

EXAMPLE 4-29 End of the canon in <u>Agnus Dei II</u>

SUMMARY OF PALESTRINA'S USE OF CANTUS FIRMUS

IN HIS CANTUS FIRMUS MASSES

EXAMPLE 5-1   The themes of the seven C.F. masses

Thematic Material

Length and character

　　　Palestrina's C.F. themes vary greatly in both length
and character. The longest, found in Missa Octavi toni, has
sixty-seven notes, the shortest, in the hexachord mass, Missa
Ut re mi fa sol la, has only six notes. In four of the masses
the themes are divisible into three or more parts, some con-
taining subsections, with little or no repetition. Four
masses use repetition as an important component of their
themes. The ranges of the themes vary from a fourth in Missa
Panem nostrum to a ninth in both Missa Octavi toni and Missa
L'homme armé. The following chart summarizes the structures
of the seven C.F. themes.

Mass	Theme parts	Repeti tions	Length	Leaps	Disjunct motion	Range
Ecce	I, II, IIIa,b	no	28 notes	7	25%	6th
L'homme	A1, A2, A3 B1, B2, B3	yes	37 notes	9	24%	9th
Hexachord	A,B	yes	6 notes	-	0%	6th
Ave Maria	A, A', A	yes	10 notes	3	30%	5th
Octavi	1, 2, 3, 4, 5, 6, 7	no	67 notes	4	6%	9th
Veni	1, 2, 3, 4	no	39 notes	8	21%	7th
Panem	A, A', A	yes	21 notes	1	5%	4th

The C.F. of <u>Missa Panem nostrum</u> is in conjunct motion except for one upward leap of a third, and the lengthy C.F. of <u>Missa Octavi toni</u> is primarily conjunct except for four leaps of a fourth and two of a third. The C.F. of <u>Missa L'homme armé</u>, contains much disjunct motion with an octave leap and many leaps of fourths and fifths.

Derivation of themes

Palestrina rarely made adaptations to the themes he used for C.F. in the masses. The C.F. for <u>Missa Panem nostrum</u> is a derived theme, both in note sequence and in pitch, as seen in the following comparison.

EXAMPLE 5-2   A comparison of the C.F. from <u>Missa Panem nostrum</u> with the theme from <u>Pater noster</u>

There is also a close parallel in structure between the C.F. of Missa Panem nostrum and that of Missa Ave Maria. The theme of Missa Ave Maria, as yet unidentified, may have come from any of three sources; (a) a freely composed theme, (b) a direct quotation from a sacred or secular tune, or (c) a derived theme. Palestrina used the "ancient" C.F. technique and it is possible that he may have used the old soggetto cavato procedure as well. One might speculate on a soggetto source for the C.F. of Missa Ave Maria. It would be necessary to match an appropriate word or words having ten vowels to the available solmization syllables in the mutated hexachords. The Ave Maria theme, having B^b, is in a transposed mode which then allows three possibilities for the solmization of seven of the notes, and four possibilities for the other three notes, as seen in example 5-3. The text of the C.F. theme, Ave Maria gratia plena, contains a total of ten vowels, but all of them do not fit into the solmization pattern. A number of names selected from those familiar to Palestrina, each containing ten vowels, could be candidates for a soggetto cavato theme. These names include those of churchmen, noblemen, men of the arts, churches, musical organizations and even Palestrina's Latinized name: Giammaria Ciocchi (del) Monte who became Iulio Tertio Ponti(fex) Max(imus), Cardinale Ippolito d'Este, Gugl(i)elmo Gonzaga Dux

EXAMPLE 5-3   Solmization syllables from mutated hexa-
              chords for both pitches of the C.F. of Missa
              Ave Maria

Hexachord

given pitch

transposed

soft	1	fa	mi	mi	fa	ut	mi	re	re	fa	sol	1
natural	2	--	la	la	--	fa	la	sol	sol	--	ut	2
hard	3	mi	re	re	mi	--	re	ut	ut	mi	fa	3
(transposed)												
soft	4	ut	--	--	ut	sol	--	la	la	ut	re	4
natural		same as in 1 above										
hard		same as in 2 above										

Mantova(e), Duca Alfonso II d'Este (di) Ferrara, Giovanni

Animuccia, Michelangelo Buonnarroti, San Giovanni Laterano,

L'Accademia (di) S. Caecelia, Ioannis Petri Loisij, or

Joann(es) Petrus Loysi(us) Pr(a)enestinus. All the vowels

for these names also do not completely match the available

solmization syllables, but in four other names, the solmiza-

tion syllables and vowels do match. The numbers underneath

the vowels indicate the hexachord in which the syllable is

found, (cf. Example 5-3). The names are: Maria Gismondi (da)
                                          1 12 3 4   1

Palestrina, the composer's mother; Lucrezia Gori (da)
4 1   3 3   4 3 11   4 1

Palestrina, his first wife; and a word order change for S.
4 1   3 3

Caecilia Accademia. These three names, however, use many of
13 1 32 2 4 1 33

the mutated hexachords, perhaps lessening their plausibility. The fourth possibility is a combination of Palestrina's Latinized name and the name of the accademy he helped to found, S. Caecilia. If the names are spelled in retrograde and vowels selected, the solmization syllables of all ten notes of the theme derive from the same hexachord:

ailic(e)aC suisy(o)L s(u)rteP sennaoJ.
ll l   l   ll   l   l ll

The Manner of Use

Long notes and integration

In three masses, Ecce sacerdos, L'homme armé and Ave Maria, the C.F. voice sings primarily long notes through every movement. In the other four C.F. masses long notes are used primarily in the C.F. voices in all but two of the movements (Gloria and Credo). These two movements each contain much integration of the C.F. note values with those of the other voices of the mass. In the Gloria of Missa Panem nostrum there are some long notes, but in the Glorias of Missa Ut re mi fa sol la, Missa Octavi toni and Missa Veni creator the note values are completely integrated. In the Credos of these masses, only Missa Octavi toni has completely integrated note values; the Credos of the other three masses, Panem nostrum, Hexachord, and L'homme armé, each contain some long notes. Missa Panem nostrum is the only mass with some

integrated passages in Sanctus. Many movements and sections,
such as the Kyries of both Ecce sacerdos and Panem nostrum,
the Gloria of Ecce sacerdos, and the Sanctus and Agnus Dei of
Veni creator, contain a typical whole-note C.F. The first
sections of both the Gloria and Credo in L'homme armé use
greatly elongated note values for the C.F. In contrast to
this elongation, the note values of the C.F. of Kyrie II in
L'homme armé are very short.

The C.F. voice

        There is a general consistency in maintaining the
same C.F. voice. In three of the masses, Ave Maria, Octavi
toni, and Veni creator, the C.F. is found in the same voice
throughout the work. Three others, Panem nostrum, Hexachord,
and L'homme armé, use few changes of the voice singing the
C.F.; some of these changes are the result of canons requir-
ing two voices for the singing of the C.F. Ecce sacerdos
magnus is the mass with the greatest variation in this re-
spect. In seven sections the C.F. is in the tenor, three
sections in the altus and two in cantus.

Entries and endings

        The C.F. voice generally enters after, rather than
before the other voices. In twenty-six of the thirty-five
movements in the seven C.F. masses the C.F. voice enters last

or second last, which, taken together represent about seventy-four per cent of the movement entries. Only about nine per cent (three of the thirty-five) of the C.F. entries begin the movement. The average length of silence before the entry of the C.F. voice is about seven and one-half bars. The longest period is twenty-one bars and the shortest is less than one bar.

In twenty-five of the movements, the ending of the C.F. theme occurs before the end of the movement and the last note is extended an average of about three bars. In only ten cases do the endings of the C.F. theme and the movement coincide. In three of the sections the C.F. voice ends with rests.

Degree of Use

One mass of the seven, Missa Ut re mi fa sol la, has C.F. in every section of the work. Missa Ecce sacerdos, on the other hand, has five sections without C.F. In the other five masses the C.F. is absent only in the Crucifixus.

The degree of activity of the C.F. voice differs in each of the seven C.F. masses. In Missa Ave Maria, for instance, the number of bars rest in the C.F. voice almost equals the number of bars that the C.F. voice sings. Compared to this the C.F. voice of the Hexachord mass is seldom silent. The comparative degree of inactivity in the C.F. voice is in-

dicated by the following figures which represent the percent-
age of bars rest in the C.F. voices of each mass.

	Ecce	L'homme	Hexachord	Ave	Octavi	Veni	Panem
Kyrie	5.9	34.4	22.3	42.6	35.5	18.4	38.2
Gloria	24.2	29.9	13.8	46.5	30.4	25.0	37.8
Credo	46.9	40.5	24.3	66.0	50.1	49.0	56.8
Sanctus	83.0	35.2	18.5	48.8	33.6	19.6	32.5
Agnus Dei	49.3	20.4	23.2	42.9	24.6	10.2	37.7
Total	49.3	33.7	20.7	52.6	37.7	27.9	42.5
	(26.0)	(27.6)	(20.7)	(46.6)	(30.6)	(20.3)	(37.0)

The figures in parentheses represents the percentage of bars
rest in the work, excluding the sections that contain no C.F.

In the case of Missa Ecce sacerdos, the sections without C.F.

represent an appreciable amount of the whole; in five of the

other masses the Crucifixus, the section without C.F., ac-

counts for five to eight per cent of the complete work. In

no case does the C.F. voice sing anything but the C.F.; if

the theme is not sung, the voice is silent.

For comparative purposes the percentages are given

below for the three masses which contain the most C.F., but

which were eliminated from the list of C.F. masses (Chapter

III). The first column (A) represents the per cent of the

complete work in which the C.F. does not sing; the second (B)

represents the per cent of rests in the movements where C.F.

is mainly used.

Mass	A	B
De beata virgine	79% (without C.F.)	23% (without C.F.)
Quarta	82%	60%
Tu es Petrus	90%	61%

It can be seen that in Missa De beata virgine the C.F. is used consistently in the movements where it is present at all, but taking each of the works as complete units the figures reconfirm their classification as something other than C.F. masses.

Accidentals and transpositions

Neither the use of accidentals in the C.F., nor the use of transpositions is frequent. Accidentals in the C.F. voice are found mostly in Missa Octavi toni, Missa Veni creator, and Missa Panem Nostrum. Sometimes the accidentals are used to avoid the tri-tone; sometimes they give the impression of a modulation in a dominant-tonic relationship. This implication of tonality may be evidence that these three masses were written later in Palestrina's career. An accidental in the C.F. voice in Qui tollis of Missa Veni creator spiritus initiates a series of secondary dominants very like that found in diatonic harmony (Example 5-4).

EXAMPLE 5-4   Functional secondary dominants in <u>Missa Veni</u>
<u>creator spiritus</u>:   <u>Qui tollis</u>, bars 95-97

Besides the upward transpositions previously mentioned
as the A' parts of the themes for <u>Missa Ave Maria</u> and <u>Missa</u>
<u>Panem nostrum</u>, the transpositions found in the C.F. masses
are all either a fourth or fifth downward. The masses in
which transpositions of the C.F. are found, <u>Missa Ecce</u>
<u>Sacerdos</u> and <u>Missa L'homme armé</u>, are not those that contain
accidentals, and are works that are known to have been writ-
ten earlier in his career. In the case of <u>Missa Ecce</u>
<u>sacerdos</u> the transpositions are related to the range of the
voice singing the C.F., with the same pitch used throughout
the section. In <u>Missa L'homme armé</u> the transpositions gen-
erally occur in the repetition of theme parts and are used in
the manner of a thematic development or thematic variation.

Proportional conflict

Proportional conflict has been discussed in relation
to Missa L'homme armé, however it is also present in three
other C.F. masses. In Missa Ave Maria two cases occur, one
case in Hosanna and one in Agnus Dei II. In Agnus Dei II of
Missa Veni creator there is one double time signature. All
but one of the proportional conflicts involve the C.F. voice.
In Agnus Dei III of Missa Ecce sacerdos magnus, in which
there is no C.F., three different time signatures occur
simultaneously, rather than just two as found in the other
masses.

EXAMPLE 5-5 Opening of Missa Ecce sacerdos magnus:
            Agnus Dei III which shows the three time
            signatures indicated by Palestrina.

Contrapuntal Devices

Imitation of the C.F. by the contrapuntal voices does occur but it is not a major precedure in any of the masses. It consists mainly of a statement of the theme, or part of the theme, by one or more of the voices at the beginnings of movements or sections. Following the brief imitative opening, the voices generally continue in free counterpoint. Missa Ecce sacerdos and Missa Ave Maria are the two masses with the least amount of imitation. Missa L'homme armé and the Hexachord mass are the two that contain the most. Generally the Sanctus is the movement in each mass where imitation is used to the greatest degree, however in Missa Ecce sacerdos it is not found in Sanctus, and in Missa Panem nostrum, although the whole first phrase is imitated in the Sanctus, it is only found in cantus and bassus.

Many fifteenth- and early sixteenth-century masses contain highly imaginative and clever contrapuntal devices. Andrews states that Palestrina was the complete master of straight-forward canon, and there are many examples throughout his masses. However, "Palestrina rarely if ever used the more abstruse forms of canonic device; mirror canons, inversions, and the like are not a part of his materia musica."[1] In the C.F. masses of Palestrina, extended canon is found in

---

[1]Andrews, Technique, p. 158.

four masses, three in which the C.F. voice is involved, and one mass in which it is not. Missa Panem nostrum and Missa Ut re mi fa sol la each have a canon in Agnus Dei II, using the C.F. voice as the leader. The canons in Missa Ave Maria, which are not part of the C.F. voice, are found in both Agnus Dei I and II. The fourth canon is in the Hosanna of Missa L'homme armé, and it also uses the C.F. voice as leader.

Other specific contrapuntal devices are rarely present in the C.F. masses either in the C.F. voice or in the contrapuntal voices. Augmentations and some diminutions are contained in some of the C.F. voices throughout the masses. Migratory C.F. is found only once, in Agnus Dei of L'homme armé (p. 73). Fragmentation of the C.F. has been observed in Missa Ecce sacerdos (pp. 60-61) and in Missa L'homme armé (p. 71) where, in each case, only one part of the theme was used as the C.F. in the particular sections of the mass. Another short fragmentation is seen in Missa Octavi toni (bar 94 of Gloria); the first three notes of part 7 of the theme are stated after the singing of the complete theme, and before the repetition of part 7. Repetition, a type of fragmentation, is found mostly involving the latter parts of the themes, after the complete themes have been sung. Neither retrograde nor inversions are used in the C.F. of any of the C.F. masses.

Conclusion

The characteristics of Palestrina's cantus firmus masses have been listed. Palestrina used "strict" cantus firmus in the composition of a few of his 103 masses, of which 7 are correctly classified C.F. masses. The manner in which Palestrina used the C.F. technique in these seven compositions has been investigated and illustrated.

Some of the C.F. masses were published early; some, although published posthumously, were undoubtedly written early in his career; some were probably written later, thus the "old-fashioned" compositional technique of cantus firmus was perhaps used throughout most of Palestrina's professional life. The Palestrina masses are as far removed from the present day liturgy, and are probably as obsolete now as the C.F. technique was when Palestrina wrote the masses. Many of the C.F. masses are regarded as outstanding examples of the sixteenth-century sacred vocal art.

REFERENCES

Agricola, Alexandri. Opera Omnia. Vol. XXII of Corpus
        Mensurabilis Musicae. Edited by Edward R. Lerner.
        67 vols. n.p.: American Institute of Musicology,
        1961.

Andrews, H. K. The Technique of Palestrina. London: Novello
        and Co., 1958.

Apel, Willi. Harvard Dictionary of Music. 2nd ed. Cambridge,
        Mass.: Belknap Press of the Harvard University Press,
        1969.

_____. The Notation of Polyphonic Music 900-1600.
        Cambridge, Massachusetts: The Medieval Academy of
        America, 1961.

Baker's Biographical Dictionary of Musicians. 4th ed. New
        York: G. Schirmer Inc., 1940.

Barbireau, Jacobi. Opera Omnia. Vol. VII of Corpus Mensur-
        abilis Musicae. Edited by Bernhardus Meier. 67 vols.
        Amsterdam: American Institute of Musicology, 1954.

Boyd, Malcolm. Palestrina's Style. London: Oxford Univer-
        sity Press, 1973.

Brumel, Antonii. Opera Omnia. Vol. V of Corpus Mensurabilis
        Musicae. Edited by Barton Hudson. 67 vols. n.p.:
        American Institute of Musicology, 1969.

Bukofzer, Manfred F. "The Unknown Chansonnier of the 15th
        Century." The Musical Quarterly XXVIII (January,
        1942), 14-49.

Cohen, Judith. The Six Anonymous L'homme armé Masses in
        Naples, Biblioteca Nazionale, MS VI E 40, Vol. 21 of
        Musicological Studies and Documents. General editor,
        Armen Carapetyan. n.p.: American Institute of
        Musicology, 1968.

Compère, Loyset. *Opera Omnia*. Vol. XV of *Corpus Mensurabilis Musicae*. Edited by Ludwig Finscher. 67 vols. n.p.: American Institute of Musicology, 1958.

Davison, Archibald T., and Willi Apel. *Historical Anthology of Music*. Vol. I. Cambridge, Mass.: Harvard University Press, 1966.

Des Prez, Josquin. *Werken van Josquin Des Pres*. Uitgegeven door A. Smijers. Amsterdam: Vereniging voor Nederlandse Muziekgeschiedenis, 1926-68.

Fauges, Guillaume. *Opera Omnia Fauges*. No. 7 of *Publications of Medieval Musical Manuscripts*. Brooklyn, N.Y.: Institute of Medieval Music, 1959.

Fellerer, K. G. "Church Music and the Council of Trent." *The Musical Quarterly* XXXIX (October, 1953), 576-594.

Grove's Dictionary of Music and Musicians. 5th ed. New York: St. Martin's Press Inc., 1954.

Huff, Jacob H. "Palestrina's Missa Ecce Sacerdos Magnus." *American Musicological Society Journal* VII (1954), Abstracts p. 89.

Jedin, Hubert. *A History of the Council of Trent*. Vol. II. London: Thomas Nelson and Sons Ltd., 1958.

Jeppesen, Knud. "Palestrina." *Die Musik in Geschichte und Gegenwart*. Vol. X. Kassel: Bärenreiter, 1962.

_____. *The Style of Palestrina and the Dissonance*. London: Oxford University Press, 1946.

Lang, Paul Henry. *Music in Western Civilization*. New York: W. W. Norton and Co. Inc., 1941.

Lees-Milne, James. *Saint Peter's: The Story of Saint Peter's Basilica in Rome*. Boston: Little, Brown and Co., 1967.

Liber Usualis. Tournai, Belgium: Desclée and Co., 1957.

Lockwood, Lewis H. "Vincenzo Ruffo and Musical Reform after the Council of Trent." *Musical Quarterly* XLIII (July, 1957), 342-371.

Mann, Alfred, trans. and ed. The Study of Counterpoint from
        Johann Joseph Fux's Gradus Ad Parnassum. New York:
        W. W. Norton and Co. Inc., 1965.

Missale Romanum. 8th ed. Boston: Benziger Brothers, Inc.,
        1920.

Monumenta Polyphoniae Liturgicae. Rome: Societas Universalis
        Sanctae Ceciliae, Series I, 10 vols., 1948. Series
        III, 6 vols., 1957-66.
                Contains L'homme armé masses by Dufay,
        Busnois, Caron, Faugues, Regis, Ockeghem, de Orto,
        Basiron, Tinctoris, Vaqueras, and the six anonymous
        L'homme armé masses from Naples.

Morgenstern, Sam, ed. Composers on Music. London: Faber
        and Faber, 1956.

Morris, Reginald Owen. Contrapuntal Technique in the
        Sixteenth Century. Oxford, England: Clarendon Press,
        1964.

Ockeghem, Johannes. Collected Works. Edited by Dragan
        Plamenac. Vol. I. n.p.: American Musicological
        Society, 1959.

Palestrina, Giovanni Pierluigi da. Le Opere Complete di
        Giovanni Pierluigi da Palestrina. 32 Vols. Rome:
        Instituto Italiano per La Storica Della Musica
        Edizione Scalera, 1939-72.

_____. Pierluigi da Palestrina's Werke. Edited by Franz
        Xaver Haberl. 33 Vols. Farnborough, Hants, England:
        Gregg International Publishers Ltd., 1968, repub-
        lished from Breitkopf & Härtel, Leipzig, 1880.
                The C.F. masses are in Vols. 10, 12, 15, 20,
        23, and 24.

Pastor, Ludwig, Freiherr von. The History of the Popes. 5th
        ed. Vols. IX to XXIV. Translated by Ralph Frances
        Kerr. 40 vols. London: Kegan Paul, Trench, Trubner
        and Co. Ltd., 1923-57.

Pipelare, Matthaeus. Opera Omnia. Vol. XXXIV of Corpus
        Mensurabilis Musicae. Edited by Ronald Cross. 67
        vols. n.p.: American Institute of Musicology, 1967.

Pyne, Zoë Kendrick. _Giovanni Pierluigi da Palestrina: His Life and Times_. London: John Lane the Bodley Head Ltd., 1922.

Reese, Gustave. _Music in the Renaissance_. New York: W. W. Norton and Co. Inc., 1959.

Roche, Jerome. _Palestrina_. Vol. VII of _Oxford Studies of Composers_. General editor Colin Mason. London: Oxford University Press, 1971.

Rore, Cipriani. _Opera Omnia_. Vol. XIV of _Corpus Mensurabilis Musicae_. Edited by Bernhardus Meier. 67 vols. n.p.: American Institute of Musicology, 1966.

Soderlund, Gustave Fredric. _Direct Approach to Counterpoint in 16th Century Style_. New York: Appleton-Century-Crofts, Inc., 1947.

_____, compiler. _Examples of Gregorian Chant and Works by Lassus, Palestrina and Ingegneri_. New York: Appleton-Century-Crofts, Inc., 1946.

Sparks, Edgar H. _Cantus Firmus in Mass and Motet 1420-1520_. Berkeley: University of California Press, 1963.

Strunk, Oliver. "Origins of the 'L'homme armé' Mass." _Bulletins of the American Musicological Society II_ (June, 1937), Abstracts, p. 25.

Westrup, Sir Jack A. and F. Ll. Harrison. _Collins Music Encyclopedia_. London: William Collins Sons and Co. Ltd., 1959.

APPENDIX

EXAMPLE 1   Josquin, Vive le roy

The soggetto cavato melody is used as a C.F. at two different pitch levels.

hard hexachord

EXAMPLE 2   Josquin, <u>Ut Phoebi radiis</u>: a solmization motet

Josquin des Prés.

-ber in-star ha - - bens super a - e - ra pen - - -

-ber in-star ha - bens su-per a - e - ra pen - - -

ut

nas, pen - - - nas, Ut re - mi fas sol-

nas, pen - nas, pen - - nas, pen - - - nas, Ut re - mi fas sol-

ut re mi fa sol

re mi fa sol

va - ces tra - du-ce - re mer - - ces,

- va - ces tra - du-ce - re mer - ces, Ut re mi fas

ut re

ut re mi

Pe - tri cur - re-re pro - ra, Sic su-per

so - - la Pe - tri cur - (re-re) pro - ra, Sic su-per

mi fa sol la la

fa so - - la Pe - tri cur - (re-re) pro - ra, Sic su - per

om-ne quod est (re) - gnas, o vir - go Ma - - ri - - a.

om-ne quod est re - gnas, o vir - - go Ma - - ri - a.

la.

om-ne quod est (re) - gnas, o vir go Ma - - ri - - a.

EXAMPLE 3   Josquin, <u>Missa Hercules dux Ferrariae</u>: <u>Kyrie</u>

The <u>soggetto cavato</u> melody is used as the C.F. in a

typical, whole-note manner.

EXAMPLE 4   Palestrina, _Missa Panem nostrum_: _Kyrie I_

The C.F., starting last, is sung in typical long-note manner, using one whole note of the theme to a bar.

EXAMPLE 5   Palestrina, <u>Missa L'homme armé</u>: <u>Gloria</u> (first
section)

The C.F. is sung in an extended long-note manner,

rhythmically patterned after the chanson.

EXAMPLE 6 Palestrina, <u>Missa Ut re mi fa sol la</u>: <u>Gloria</u>
(See p. 135)

A C.F. which is rhythmically integrated with all
other voices and is seldom absent.

Gloria.

CANTUS I. Et in ter-ra pax ho-mi-ni-bus bo-næ vo-lun-tá-

C.F. CANTUS II. Et in ter-ra pax ho-mi-ni-bus bo-næ vo-lun-tá-

ALTUS I. ho-mi-ni-bus bo-næ vo-lun-tá-tis.

ALTUS II. Et in ter-ra pax ho-mi-ni-bus bo-næ vo-lun-tá-

TENOR Et in ter-ra pax ho-mi-ni-bus bo-næ vo-lun-tá-

BASSUS Et in ter-ra pax ho-mi-ni-bus bo-næ vo-lun-tá-

tis. Lau-dá-mus te. Ad-o-rá-mus te. Glo-ri-fi-

tis. Be-ne-dí-ci-mus te. Ad-o-rá-mus te. Glo-ri-fi-

Lau-dá-mus te. Be-ne-dí-ci-mus te. Glo-ri-fi-

tis. Lau-dá-mus te. Be-ne-dí-ci-mus te. Ad-o-rá-mus te. Glo-ri-fi-

tis. Be-ne-dí-ci-mus te. Ad-o-rá-mus te. Glo-ri-fi-

tis. Lau-dá-mus te. Ad-o-rá-mus te. Glo-ri-fi-

cá-mus te. Grá-ti-as á-gi-mus ti-bi pro-pter ma-

cá-mus te. Grá-ti-as á-gi-mus ti-bi pro pter ma-

cá-mus te. Grá-ti-as á-gi-mus ti-bi pro-pter ma-

cá-mus te. Grá-ti-as á-gi-mus ti-bi pro-pter ma-

cá-mus te. Grá-ti-as á-gi-mus ti-bi pro-pter ma-

cá-mus te. Grá-ti-as á-gi-mus ti-bi pro-pter ma-

EXAMPLE 7 Palestrina, <u>Missa Ave Maria</u>: <u>Sanctus</u>

     Repetitions of the C.F., both theme and text, are
separated by many periods of rests. The total number of
bars rest almost equals the number of bars in which the C.F.
is present.

Sanctus